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ABSTRACT

This literature review of factors affecting the postsecondary decision-making process, with special emphasis on parents' and students' attitudes and characteristics, focuses, in the first section, on research on these topics: (1) student and family characteristics (ability, expectations, motivation, race and sex, family background including genetic influences, values and role models, and family income); (2) school and community characteristics (teachers' encouragement, counseling, peer networks, quality and climate of school, and curriculum placement); (3) alternatives available after high school (noncollege alternatives such as employment, military service or marriage, postsecondary educational alternatives, and influencing factors such as proximity and cost); and (4) knowledge of alternatives. Part II of the book discusses the development of the parents' section of the High School and Beyond questionnaire, which was designed to gather detailed parental financial information and attitudinal data, to be combined with data from students on their abilities, plans, and perceptions. The major sections of the survey report present a conceptual design based on the results of the review in part I, and focus on four ways in which survey data might be analyzed. Listings of the parent survey items which operationalize the significant variables are provided along with a discussion of each. Appendix A provides the High School and Beyond parent questionnaire and Appendix B contains standard financial aid forms. Cited references and a list of additional references are also appended. (MCF)

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Contractor Report

Postsecondary Education Plans and Choices: Review of the Literature and Design for Analysis of the Parents Data

Rachel A. Rosenfeld
Samuel S. Peng

U.S. DEPARTMENT OF EDUCATION
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Postsecondary Education Plans and Choices: Review of the Literature and Design for Analysis of the Parents Data

National Opinion Research Center

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April 1980

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NCES 83-200

TABLE OF CONTENTS

PREFACE i

1. REVIEW OF THE LITERATURE ON POSTSECONDARY EDUCATION PLANS AND CHOICES 1

1. Introduction 1

2. Student and Family Characteristics 5

2.1. Ability 5
2.2. Aspirations, Expectations, Motivation 8
2.3. Race and Sex 9
2.4. Family Background 11

2.4.1. Genetic Influences 14
2.4.2. Values and Role Models 15
2.4.3. Direct Encouragement and Parents' Aspirations and Expectations 18
2.4.4. Family Income 22

2.4.4.1. The Demographic Squeeze 26
2.4.4.2. Planning for and Willingness to Pay 26

3. School and Community Characteristics 36

3.1. Teachers' Encouragement 36
3.2. Counseling 37
3.3. Peer Networks 38
3.4. Quality and "Normative Climate" of School 38
3.5. Curriculum Placement 40

4. Alternatives Open After High School--The Structure of Opportunity 43

4.1. Noncollege Alternatives 46

4.1.1. Employment 46
4.1.2. Military Service 49
4.1.3. Marriage 49

4.2. Postsecondary Educational Alternatives 51

4.2.1. Proximity 51
4.2.2. Institutional Characteristics 54
4.2.3. Cost and Financial Aid 58

4.2.3.1. Cost 59
4.2.3.2. Financial Aid 64

5. Knowledge of Alternatives 74

6. Summary 82

II. CONCEPTUAL DESIGN: HIGH SCHOOL AND BEYOND PARENTS SURVEY 85

1. Introduction 85

2. Parents' Aspirations and Expectations 90

3. Parents' Knowledge of Postsecondary Education 93

4. Planning For and Willingness to Contribute to a Child's Education 96

5. Ability to Contribute and Expected Contribution 100

FIGURE 1
Conceptual Model of Postsecondary Education Decision-making .. 89

APPENDICES
A. Parents Pretest Questionnaire—Self-Administered Version 103
B. Financial Aid Forms 104

REFERENCES
I. Cited References 105
II. Additional References 114

PREFACE

This report is in partial fulfillment of NCES contract 300-78-0208 and is made to the National Center for Education Statistics and the Office of Evaluation and Dissemination, Department of Education. The work statement called for this report as follows:

> The first task will be a review of the existing literature on postsecondary educational plans, both by high school students and by their parents, and preparation of a conceptual design based on this review.

This report, accordingly, is in two parts. The first part is a review of the literature on factors affecting the postsecondary education decision-making process, with special emphasis on parents' and students' characteristics and attitudes. This review, however, looks at research on factors beyond simply the parents and students, looking at the influence on choices for post-high school activities of schools and of the alternatives available to a student after high school. These factors from outside the family will condition the decisions that a given individual makes about seeking training and employment after high school. The link between these conditions and the family decision-making is the knowledge about the available opportunities held by students and their parents. The little research on this link is also reviewed.

This literature review suggests research that would use data from all parts of the High School and Beyond surveys and thus complements the conceptual design for the student survey (Coleman et al. 1979) and for the Hispanic supplement (Nielsen 1980). It is used here in the second part of the report to develop a conceptual design for the analysis

of the parents survey data. This second part of the report suggests the ways in which the parents data might be analyzed to fill in the gaps in our knowledge about family decision making concerning postsecondary education, focusing on the ways the parents' aspirations and expectations for their child are developed and affect their child's plans, on the parents' knowledge of postsecondary education options, on their willing to pay and their planning for financing of their child's further education, and on their ability to make the contributions to their child's postsecondary education expected under different methods of needs assessment for financial aid.

I gratefully acknowledge the research assistance of Lorayn Olson, Thomas Reif, and Gladys Epting, as well as the assistance of Patrick Bova, the National Opinion Research Center librarian, Susan Campbell, the NORC editor, and Toshi Takahashi, Chris Lonn, Irene Edwards, and Jane Martin of the NORC Word Processing Center. I thank also James Hearn, of American College Testing Program, for his thoughtful comments and suggestions.

PART I. REVIEW OF LITERATURE ON POSTSECONDARY EDUCATION PLANS AND CHOICES

1. Introduction

There are many goals that could guide government policies that affect who goes on in school after high school. One goal is that all students have the chance to go on, regardless of ability or financial circumstances. Underlying such a goal might be a concern for insuring that equality is prevalent in a society, for redistributing income (since at a given time, those with higher education usually receive higher income), or for guaranteeing that there is in the society an educated citizenry capable of exercising the increasingly complex rights and responsibilities of a democracy (Orwig, 1971). To achieve this goal, governments at various levels might subsidize education. Today in the United States there is the goal that all children should have equal access to at least primary and secondary schooling, and governments contribute to this schooling accordingly. Another goal with respect to who continues in school after high school might be that those who merit going on have access to further schooling, that there be equality of opportunity rather than equality of access. The idea that meritocratic selection results in the most effective allocation of resources and in the greatest productivity (see Davis and Moore, 1946) might lead a government to choose this goal and to provide scholarships based on evidence of the promise of doing well in school or to simply subsidize the postsecondary education of all who qualify for it. In theory, the latter policy is applied today in the U.S.S.R. (although there is evidence that the actual selection of students

for postsecondary education involves more than merit considerations). Still another goal directing policy could be that those who want an education pay for it. The justification for having this goal could be a belief that education is like other consumer goods, having benefits that accrue to those who buy it. Educational policy then would involve not subsidizing education. With respect to education generally, this is indeed the attitude that prevailed in the United States before the late nineteenth century.

In actuality, of course, it is not always clear what goals are guiding policy. In part this is because a combination of goals (and even sometimes contradictory ones) are behind policy. In the U.S. today, for example, governments have as a goal increasing equality of access to higher education. At the same time, there is a belief that parents and students have a responsibility to pay what they can since there is the perception that at least some of the benefits of postsecondary education are individual rather than social. Also, one needs to keep in mind that decisions concerning who goes on to postsecondary education involve actors other than governments. Postsecondary schools usually impose at least minimal criteria for admission. Students and their parents choose among alternatives using their perceptions of opportunities, costs, and benefits. Testing the extent to which educational policies have been effective in achieving different goals and determining the extent to which given types of policies can be effective, given the other actors in the equation, require a careful analysis of the factors behind students' decisions as to what to do after high school.

The following review of the literature on postsecondary education plans and choices focuses on the characteristics, attitudes, and behaviors of the student and his/her parents as they affect the nature of the student's

post-high school activities. Student characteristics are expected to be important--given meritocratic selection, students' ability and school performance would influence their postsecondary education plans and behavior. One would expect also that family characteristics are important--some of the student's characteristics will have been shaped by the family (e.g., aspirations for the student may affect the student's plans), and the financial position of the family could be a factor in decisions about what to do after high school, given that parents have responsibility for paying for their child's further education. However, the influences on the student' decisions extend outside the family, to peers, teachers, the school structure, and the community. The structure of opportunity also affects postsecondary education plans: the type, location, and number of postsecondary institutions; job opportunities as alternatives to further education; financial aid; general economic and political conditions.

Opportunities which are available but about which nothing is known are effectively nonexistent. Knowledge of the opportunity structure modifies the range of available opportunity. The type of knowledge a student and his/her parents possess may well be affected by student and family, and by school and community characteristics. This review will look at student and family characteristics and at the effects of opportunity characteristics, including the extent to which there is adequate knowledge about the nature of post-high school opportunity. Only by examining the whole constellation of factors involved in the postsecondary education choice process can effective policy be formed.

An important point must be kept in mind in reading this review: the effects of student and family characteristics upon postsecondary

education plans and behaviors cannot be understood simply by looking at what exists at the end of high school. These effects are part of a process. To the extent that parents affect their child's decisions through encouragement, this encouragement develops and is in response to the child's aspirations and ability. In cases where financial preparation is needed, it often must begin before 12th grade, and may affect the decision made at the end of 12th grade about whether to continue on in school. Plans may affect information gathering by both students and parents, and the information gathered may affect plans. Further, the decision to continue schooling is not one but a series of decisions (see, for example, Mare 1977): whether to continue in secondary school and, if so, what courses to take; whether to get a high school diploma; whether to plan on going to college at all; whether to go right after high school or wait (as more students are doing today); what sort of institution to choose; whether to transfer or drop out for awhile, having entered some college; whether to attend full- or part-time; whether to continue in college or other schooling until graduation. Family and student characteristics may have an effect at all stages of the decision-making process, setting the conditions--along with exogeneous factors--for decisions at the next stage. Only by looking at the process, as well as at the factors within and outside the family that affect post-secondary decisions, can policy be effective in achieving educational goals. In most studies reviewed here, high school students, usually seniors, provided the data. Therefore, for them, the end of high school had been reached and the decisions to be made were primarily whether and how to continue schooling after receiving a high school diploma.

2. Student and Family Characteristics

2.1. Ability

Sociologists have tended to focus on student and family characteristics, as exemplified and reinforced by their reliance on surveys of students and (occasionally) parents. In assessing equality of opportunity for higher education, they are often interested in comparing the effects of student ability with the effects of other variables. In a strictly meritocratic society, ability to do well in school would be a prime factor in predicting postsecondary plans and behavior. One consistent finding is, in fact, that ability, as measured by I.Q. scores, other test scores, grades, or class rank, does have a large effect on whether and where a student continues formal education after high school.

Many studies have produced evidence of the effect of ability on postsecondary plans and attendance. Thomas and her co-authors (1979: 151), using the 1972 National Longitudinal Survey of High School Seniors (NLS72), concluded that "academic credentials were the major determinants of college access for all groups." Sewell and Shah (1967), using data from a survey of Wisconsin high school seniors in 1957 (the Wisconsin study), found that scholastic ability had direct effects on planning to go to college, on actually attending college, and on college graduation. For example, 12.2 percent of the males and 10.5 percent of the females in the low-ability quartile planned to go to college, compared with 65.2 percent of the males and 53.3 percent of the females in the high-ability quartile. The correlations of mental ability with college plans, attendance, graduation, and general educational attainment were .43, .45, .40, .48 for men and .35, .35, .33, .37 for women (see also

Sewell and Hauser 1975). Reporting on results of surveys of 1956-57 Arkansas and 1955 Indiana high school students, as well as the Wisconsin study, Beezer and Hjelm (1961) mention effects of mental ability and class rank similar across surveys. With the SCOPE data on 1966 high school seniors, Kohn and his colleagues (1974) showed that the probability of admission of a given student to a given college goes up monotonically with SAT scores and class rank. These two variables interact, and there is a greater score effect for students with lower class standing. Increments in SAT scores have a greater effect on admissions when the student is below the college's median SAT. Data from the National Longitudinal Survey of Labor Market Experience (Parnes survey) of women 14 to 24 years of age in 1968 likewise illustrate the effects of measured I.Q. on college plans and attendance. For example, the proportion of young white women from families with annual incomes of $13,000 who have I.Q.s of 90 desiring to go to college, expecting to go to college, and actually going to college was .68, .64, and .43, while for those with I.Q.s of 110, it was .97, .91, and .77 (Sandell and Johnson 1977). Using the NLS72, Jackson (1977) found that the Educational Testing Service (ETS) cognitive scores and ETS summary of class rank, percentile, and course grades (from school records) explained 14 percent of the variance in application and 29 percent of the variance in attendance, more than any other set of variables except college plans. In terms of the process by which "ability" affects educational plans and achievement, mental ability (as measured by I.Q. and other such tests) tends to be mediated (though not entirely) by academic performance and by others- and self-assessment of ability, which in turn affect plans and achievement (see discussion in MacKinnon and Anisef 1979:308).

Mental ability, grades, and other academic credentials also affect where a person goes to school after high school. Sandell and Johnson (1977) found that for white women a higher I.Q. led to a better quality (with quality defined using a variety of indicators) and more expensive college. For example, a 10 point increase in I.Q. resulted in a $62 increase in tuition paid. Peng and associates (1977), in their review of results of the NLS72, found that lower ability students were more likely to go to two-year rather than four-year colleges.

There have, however, been changes over time in the relationship between ability and college attendance. Peng et al. (1977) note that, although it is true that low ability students in 1972-73 were more likely to go to two-year colleges, the increase in attendance at such schools between 1961 and 1973 came from those of middle ability. Further, the proportion of highly able students going on to four-year colleges during the same period went down--in 1961, 70 percent of those in the top ability quarter of their high school classes went on to four-year colleges; in 1972, 54 percent did. Thomas and others (1979), in comparing the effects of academic credentials relative to other factors, suggested that changes in admission policies over the last 25 years had made these credentials more important for later cohorts than earlier ones, since admission to many universities and colleges had become more selective by the mid-1970s. This is consistent with the increase in community college attendance by those with middle ability. However, in the short run at least, other factors may be involved. Sandell and Johnson (1977) noted that the importance of I.Q. for college attendance declined for seniors of 1968, 1969, and 1970, net of other factors. Given the decrease in the population of 18 to 24 year olds, the traditional attenders of colleges

and universities, it may indeed be the case in the future that institutions eager for students will be less selective.

Ability, then, has an effect. A policy issue related to how great an effect it should have is that of open admissions. As Stanley (1971) points out, things such as SAT scores do have predictive power with respect to performance and completion of college. Astin (1977) argues that most colleges are not able to meet needs of students who are not well prepared. In his analysis, he found high grade point average (GPA) and participation in an honors program in college are best predicted by the student's high school GPA. It may be preferable to equalize access to postsecondary schooling by improving test scores rather than by changing selection procedures. Further, Jencks and his associates (1972) argue for providing alternative services and opportunities for those who will not benefit from higher education rather than pushing equality of educational consumption.

2.2. Aspirations, Expectations, Motivation

Another set of individual-level characteristics that has been examined for possible effects on higher education is that of aspirations, exceptations, and motivation. Aspirations refer to what someone would like to do, expectations to what the person expects to do, and motivation to both of the preceding terms as well as to other psychological constructs. The hypothesis behind the inclusion of such variables in models of educational attainment and college attendance is that what people want to or plan to do should affect what they actually do, net of other factors. A number of studies cited above have also found effects of aspirations and expectations on the extent of schooling after high school.

Jackson (1977), using the NLS72 data, found that 14 percent of the variance in application to college and 31 percent of the variance in attendance was explained by the response to a question on how many years of education beyond high school the student would like. Sewell and Hauser (1975), using the Wisconsin data for 1957 high school seniors and the follow-up surveys, report a correlation of .66 between educational attainment and college plans and of .51 between educational attainment and occupational aspirations. Otto and Haller (1979), comparing 1957 Lenawe County, Michigan, results with those from the 1957 Wisconsin study and the Explorations in Equality of Opportunity (EEO) study, conclude that aspirations have substantial net effects on educational attainment. In an extensive review of the research on "achievement motivation" (with the meaning covering aspirations and expectations), Spenner and Featherman (1978:56) conclude:

> For the total amount of schooling an individual eventually obtains, educational aspirations during high school hold modest predictive power. Evidence from longitudinal surveys, using simple recursive specifications, shows that about 10 percent of the variation in educational attainment is attributable to the net impact of aspirations among white males. . . . Occupational aspirations have a small direct effect on educational attainment (beta approximately .03 to .19).

It must be kept in mind, of course, that goals and expectations are formed before 12th grade, and that these are revealed in the students' choice of classes throughout the high school years.

2.3. Race and Sex

Of course, not all able and aspiring students have the same chance to go to college or other type of postsecondary educational institution. Attendance has varied by race and sex. Further, ability (as it is usually measured) and aspirations are affected by non-meritocratic characteristics such as race, sex, and family social position.

Differences by sex and race have been decreasing. Peng and others (1977) report that the percentage difference between the sexes for those attending two- and four-year colleges went from 9.4 percentage points in 1961 to 3.7 percentage points in 1972. The net effects of sex on college application or attendance found with the 1972 NLS data disappeared when aspirations were controlled (Jackson 1977). By 1976, the college enrollment rates of men and women were the same (Suter 1978, using Census Bureau data), and a 1978 ACE report concluded that, "Generally, more college-age women than men are now enrolling in college" (Henderson and Plummer 1978:iii). There are still some differences in attendance by race. As of 1977, blacks were less likely to attend some type of higher education than whites, but college enrollment of blacks had increased from 6 percent of all college students in 1967 to 11 percent in 1977 (Suter 1978). With ability or family income controlled, black high school graduates were about as likely to enroll in college as whites (see also Rice 1976). However, blacks are still less likely to remain in college, as compared with whites. (Other studies, though, fail to find differences in withdrawal rates by race. See Kohn et al. 1976; NCES 1977.) Also, blacks tend to go to schools of lower selectivity as measured by a scale developed by Astin (1965) (which may be in part an artifact of the ranking given to black colleges): 71 percent of the blacks in 1972 compared with 49 percent of the whites were going to less selective institutions (Peng et al. 1977). In the area of overall amount of education received, Hauser and Featherman (1975) demonstrate that, for men, the negative effect on educational attainment of being black became positive over the birth cohorts from 1907-11 to 1947-51. On the subject of aspirations, Howell and Frese (1979) present results

from a study of five southern states showing that race differences are due to socioeconomic status composition differences rather than "innate" race difference. (However, see also Kerckhoff and Campbell 1977, for a discussion of other differences by race in the process of developing aspirations.) There is some evidence that race and ethnicity effects are stronger with respect to earlier decisions, such as whether to continue in high school, than with respect to the decision of whether to go on in school after finishing high school (see Nielsen 1980).

2.4. Family Background

In general, sex and race effects tend to be much smaller than effects of family socioeconomic status. There is some evidence that the effects of socioeconomic background on educational attainment have also been declining over the years (Hauser and Featherman 1975). Using the Occupational Change in a Generation II (OCGII) data on U.S. males 20 to 64 years of age, Hauser and Featherman found decreasing effects of father's occupation and education, of being in a broken family, and of farm background (see Mare 1977, for a methodological discussion of this trend). Still, the effects of socioeconomic background are large. In 1977, 28 percent of persons of college age were attending or had completed some college in families with incomes of less than $10,000, while the figure for families with incomes of $20,000 or over was 66 percent (Suter 1978). Using the NLS72 data, Thomas et al. (1979) found that students whose fathers had completed college were two and one-half times more likely to attend college than those whose fathers had not completed high school. Hogan (1979), using the OCGII data, has shown that parental social position also affects how long it takes to finish a given level of schooling after high school.

Family social position and background can be measured by a variety of indicators, as already shown here. One way of getting a sense of how much educational difference is due to all the forces within the family is to correlate data on siblings. Doing this, Hauser and Featherman (1975) concluded that perhaps as much as two-thirds of the variance in length of schooling among U.S. men is due in some way to family influences. Jencks and associates (1972:143), after separating out the genetic influence of the family (something not done by Hauser and Featherman), suggest that family social position and background accounts for nearly half of the variation in educational attainment.

To get a sense of the relative importance of academic ability and socioeconomic background, we turn again to Sewell and Shah (1967). They measured intelligence with the Henmon-Nelson Test of Mental Maturity, administered in the junior year, and socioeconomic status (SES) by a "weighted combination of father's occupation, father's formal education level, mother's formal education level, an estimate of funds the family could provide if the student were to attend college, the degree of sacrifice this would entail for the family, and the approximate wealth and income status of the student's family" (1967: 7). They found approximately equal effects of SES and intelligence on college plans and attendance (net of the other variable) for males, and higher effects of SES relative to intelligence on plans and attendance for females. (See Thomas et al. 1979 for comparisons by sex and race including more variables. For whites, Thomas and her associates found greater effects of SES than of ability for both males and females, controlling for curriculum and class rank, and greater effects of aptitude than SES for blacks of both sexes, again controlling for curriculum and class rank.) For those attending college, however, Sewell and Shah show that, for both

men and women, SES has only about half the relative effect (standardized coefficient) of intelligence on college graduation. Once students are in college, the effect of SES tends to decline, and ability becomes more important in finishing college, but the effect of SES does not disappear. Another way to look at this is in terms of variance explained in educational attainment. Again using the Wisconsin data, but only for males of non-farm origin, Sewell and Hauser (1972:856) report that "When academic ability is added to the model (including father's education, mother's education, father's occupation, and average parental income), the explained variance in educational attainment almost doubles, rising from 15 to 28 percent." Using data from a cohort of seniors fifteen years later (the NLS72), Thomas and others (1979) found that SES (a composite of father's education, mother's education, father's occupational status, and a household item index) explained 12.7 percent of the variance in college attendance among white males, and that academic credentials (class rank, curriculum, and a measure of scholastic aptitude formed from verbal, math, reading, and letter groups test results) explained an additional 21.1 percent of the variance.

Sewell and Shah (1967:22) conclude, "From all of this evidence it seems clear that although intelligence plays an important role in determining which students will be selected for higher education, socioeconomic status nevertheless seems to be an important factor in determining who shall be eliminated from the contest for higher education in this cohort of Wisconsin youth." From the evidence in other studies, it seems that their conclusion can be generalized widely.

The nature of family influence is complex. Hauser and Featherman (1975:37), for example, found that only about 55 percent of the correlation

between the schooling of brothers could be explained by father's education, father's occupation, number of siblings, broken family, farm origin, Southern birth, Spanish origin, and race. The remaining 45 percent was unexplained. There seem to be at least four types of influences that the family might have: (1) genetic; (2) general cultural values and role modeling, which would give a child the values and skills necessary to aspire to higher education and do well in school; (3) direct encouragement; and (4) financial assistance and planning. The general conclusion from research on family effects is that the influence of the family definitely comes from more than just financial factors.

2.4.1. Genetic Influences

Some of the effect of family background on a child's attainment shows up as an effect on scholastic ability, which in turn affects college attendance. Thomas and others (1979), for example, found that about one-third of the class effect on college attendance is through an effect on scholastic aptitude, which includes I.Q.; academic credentials are important, but are affected by family background (see also Sewell and Hauser 1975). However, Jencks and associates (1972:138-139) suggest that less than 10 percent of the overall influence of family SES on educational attainment comes through I.Q. I.Q. is only one convenient measure of "ability," which may represent either "innate" or "learned" factors or both. (Scarr and Weinberg 1978 and papers in Sociology of Education, vol. 52, July 1979 support the "innate" interpretation. See also Williams 1976 for a discussion of "innate" ability and family environment.). Genetic influences may be transmitted through other, less well studied factors as well.

2.4.2. Values and Role Models

Another way in which the family might eventually affect a student's post-high-school plans and behavior is through the general values and culture of the family, through attitudes toward work and school, and through role modeling. The continued small direct effects of parental education and occupation on childrens' educational attainment, even after controlling for income, ability, grades, encouragement, and aspirations (e.g., Sewell and Hauser 1975) might be interpreted as evidence of role modeling. In particular, the larger effects of mother's education on daughter's perception of parental encouragement, aspirations and expectations might be considered support for this (Sewell et al. 1979; see also discussion in Rosenfeld 1978). Krauss (1964), in searching for "sources of educational aspirations among working class youth" (using 1959 data on Bay Area high school seniors), found that the father's having high occupational status within the working class and having completed high school were associated with the child having college aspirations. In a review by the National Manpower Institute (1978), studies are described in which it was reported that for black male youths the availability of an adult male role model (not necessarily the father) was positively correlated with high self-esteem, school performance, and aspirations.

Motivation to "work hard" might be thought of as a way in which SES differences in values show themselves, but those with the same test I.Q. tend to get the same grades regardless of SES. "Thus, the higher academic ability of men from socioeconomically advantaged homes fully accounts for the modest effect of the background variables on grades.

At the same time, ability has a very large effect on grades, most of which is independent of background" (Sewell and Hauser 1975:91).

Bowles (1972) has hypothesized that parents' work position affect a child's future attainment by placing emphasis on self-direction (for those with middle-class jobs) versus conformity (for those from the working class). By passing along these work-related values, children from a given class would tend to get only enough education to end up in the same class as their parents. Kerckhoff (1971) indeed found class-related differences in parental values with respect to conformity and self-direction. Morgan, Alwin, and Griffin (1979), using 1973 data on Lexington, Kentucky, 12th grade students and their mothers, looked directly at the effects of parental self-direction versus conformity. They failed to find an effect of maternal values on grades, academic self-esteem, or educational expectations, but found significant effects of more common indicators of socioeconomic status such as parents' occupations and family stability. One major problem with their work is that conformity and self-direction might both facilitate academic achievement in high school.

Lane (1972) suggests that the part of parental influence related to values might work through perceived ability to plan for the future. For someone from a home in which employment of the head of household is intermittent, immediate gains might seem more reliable than gains in the future. Going to college might seem less sensible that getting a job now (jobs as an alternative to college-going will be discussed in a later section). Kerkhoff and Campbell (1977) tried to measure "fatalism," or ability to control the environment. Using data from 1969 Ft. Wayne, Indiana, 12th grade males, they found moderately strong correlations of fatalism with parents' education for whites but almost no

correlation for blacks. For both whites and blacks, the correlations of fatalism with ability and GPA were stronger. Net of the other variables (parental education, ability, and GPA), fatalism had significant effects on education expected for both whites and blacks. Although here "fatalism" seemed more of a companion to ability than to SES, one could argue that other unmeasured SES factors do in fact affect fatalism, which in turn affects educational expectations. Looking at planning by social class might hint at such values.

More than just the work position of the parents seems involved. Krauss also found that downward mobility of the family (e.g., a grandfather who held a nonmanual position while the father held a manual one) and status discrepancy (e.g., where the mother held a nonmanual job or had some college training in contrast to a father in the working class) were associated with college aspirations. Such discrepancies could give clues as to the feelings parents have about their socioeconomic position. As Jennings and Niemi (1974) point out, the affective structure of the family affects imitative processes. The National Manpower Institute report (1978) quotes Rosenthal as saying that parents' satisfaction with their own lives and with their occupational positions constituted better predictors of son's occupational aspirations and expectations than the parents' current income and occupation. The effects of working mothers on their daughters' aspirations and careers have also been found to interact with the mothers' satisfaction with their lives (Rosenfeld 1978).

Social class differences in values have often been studied through an examination of variations in educational and occupational expectations versus aspirations. Caro (1965), for example, interprets class differences in disparities between reported occupational aspirations and expectations

as support for class differences in values, resulting perhaps from differences in perception of accessibility, or from class differences in evaluation of the occupational structure.

Della Fave (1974), using data on white males from four Massachusetts communities, found class differences in preferences for various educational levels, in terms of expectations and in terms of tolerance for given lowest options. However, there was considerable overlap in aspirations from class to class. The relationships between social class and educational preference and tolerance, although moderate, were less than that between educational expectations and social class, with social class measured by an index based on father's occupation and education.

Kerckhoff and Campbell (1977:712) have suggested that some of the family effects not captured by other measures might represent degree of knowledge about the educational system. Corwin and Kent (1978:61) review Tollett as finding a correlation between parental involvement in school (e.g., visiting the school) and the child's achievement. Evidence on the influence of knowledge of post-high-school alternatives on a student's decision-making will be treated again in a later section.

2.4.3. Direct Encouragement and Parents' Aspirations and Expectations

When parents are asked about their aspirations and expectations for their children, it appears that virtually all parents, regardless of education, occupation, or income, would like their children to go on to college. Around World War II, about 81 percent of parents said they would like their children to go on to college; in 1960, 97 percent said they would. Large proportions intended (expected) to send their children to college in 1959: 80 percent of those with one or two children and 66 percent of those with larger families. Proportions of parents

desiring their children to continue school were larger than the proportion of the students themselves who say they plan to go on. (See also Kerckhoff 1971.) However, when parents were asked whether they thought their child actually would go on to college, large differences by income appeared (Jaffe and Adams 1964).

Parental encouragement and aspirations for their children have been studied directly as influences on the child's plans for after-high-school education and found to be significant. In a review of studies done in the late 1950s (including the Wisconsin study), Beezer and Hjelm (1961) point to the attitudes of parents with respect to college as important: "An attitude of indifference or discouragement on the part of parents in regard to going to college is extremely difficult for a student to overcome." Bell (1963) discusses a social-psychological model of aspirations that also includes perceived parental encouragement, and he tests it using data from 1961 Boulder male high school students. He also finds a relationship between the encouragement parents are seen as giving and high educational aspirations. The encouragement parents are seen to give is not unrelated to socioeconomic position, though. Again using the 1957 Wisconsin data, Sewell and Shah (1968) show that SES has a greater effect on perceived parental encouragement to go to college than I.Q., and that perceived parental encouragement has a greater relative effect on college plans than that of either SES or I.Q. The same sorts of results occur within more elaborate models using educational attainment as the dependent variable. Comparisons of social-psychological models of achievement (which include encouragement from significant others, including parents, as important variables) using the Wisconsin, Lenawee County, Michigan, Explorations in Equality of Opportunity, and Youth in Transition (YIT) data sets are presented in

Otto and Haller (1979). Basically, the results from the first three data sets are fairly similar, while the Youth in Transition results are somewhat at odds with the others, perhaps because of measurement differences. MacKinnon and Anisef (1979) further discuss the differences between the YIT and other results. In their own social psychological model of educational attainment using Canadian data, they found SES affected both the family's encouragement of the student and the student's self-concept of his/her academic ability and that self-concept had the greatest relative effect on educational plans, followed by family encouragement, then grades, and non-family encouragement. SES did not directly affect plans.

In a study of 1969 sixth, ninth, and twelfth grade males in the Ft. Wayne, Indiana, schools, Kerckhoff (1971) also found that perceived encouragement was a powerful predictor of educational expectations. In his models, parental encouragement was predicted by I.Q. and grades and to a lesser extent by SES. Having found the strong effect of parental encouragement, Kerckhoff went on to hypothesize (1971:112) that

> The probability of parental influence in the setting of educational and occupational goals should depend to a considerable extent on the nature of the relationship between the boy and his parents.

His analysis, however, did not offer strong support for this hypothesis. The extent to which a boy reported feeling close to his parents did not affect the level of his expectation nor the way in which he formed his plans. The extent to which a boy perceived his parents as interested in his school work had some effect on educational aspirations for older boys, although it left the rest of the model relatively unchanged. The relatively low agreement between the boys and their parents on the nature of their relationship, however, casts doubt on the validity of these

measures. Further, the degree of agreement was lower for blacks and for parents who valued conformity more. Thus the degree of invalidity was associated with race and class.

In both Sewell and Shah's work and in other studies, however, there continue to be effects of socioeconomic status that are not accounted for by parental encouragement, important as it is. For example, while Jackson (1977) found that almost all of the effects of family background on application to college were mediated through ability, aspirations, perceived parental encouragement, and so on, he found 18 percent of family background effect on eventual college attendance unmediated. MacKinnon and Anisef (1979) found that the "objective" factor of socioeconomic background (as measured by a scale based on five indicators—father's occupation, mother's occupation, father's education, mother's education, and parental income) continued to have some effect on educational attainment after controlling for the "subjective" variables of encouragement, self-concept, and aspirations and the "objective" variable, grades. One problem may be that parental encouragement is often measured as a characteristic of the student—the student's perception of encouragement—rather than as a characteristic of the parent, which might be even more strongly associated with the family's social position than the student's screening of what his/her parents hope he/she will do. As Kerckhoff (1971) showed, there is less than perfect agreement between parents and their children in their perceptions of each other's hopes for the child. The NLS80 data will include both students' perceptions of their parents' aspirations and expectations and the parents' own attitudes. But, of course, as already indicated, family position may represent a whole host of values and attitudes other than those directly related to postsecondary schooling.

2.4.4. Family Income

Economists have traditionally modeled demand as a function of prices, incomes, and tastes. With respect to education, Campbell and Siegal (1967) have followed this model to discover that 87 percent of variation in aggregate enrollment in four-year schools by eligible 18 to 24 year olds (1919-1964) could be explained by differences in disposable income and tuition costs. The conclusion is that income is an important factor in access to college. However, results at the aggregate level should not be assumed to hold for the individual. And indeed, with respect to consumption of higher education, individual-level analysis leads to results very different from those obtained from aggregate analysis.

The nature of relationship at the individual level between postsecondary education and parental income is important. Universities and the various governmental agencies expect parents to contribute to financing their children's postsecondary education, making the decision about attending an intergenerational one. Further, parental income is a factor in college and other schooling decisions that the federal and state governments can manipulate through formulae for calculating expected parental contribution and through tax rebates and deductions. Other aspects of family socioeconomic status are not as accessible to policy changes.

The effects of parental income at various stages in educational decision-making and behavior have been found to be small. Jencks and his colleagues (1972:139) say, "we would be surprised if money per se explained more than 10 or 15 percent of the overall difference in attainment between students from different class backgrounds."

Much of the effect of family income occurs through effects on mental ability, academic performance, signficant other's influence, and aspirations--about 78 percent in the Wisconsin date, 85 percent in EEO, and perhaps 59 percent in Lenawee County (Otto and Haller 1979; Table 3). Some effect is direct, though small. Looking again at the Wisconsin study, one sees that, while most of the direct measures of socioeconomic background (parental education, number of siblings, mother's employment, family intact, rural background) fail to have significant direct effects on educational attainment, income and father's occupation do have such effects, at least for white men, when student ability and perceptions are controlled (Sewell and Hauser 1975; see also Sewell et al. 1979 for sex comparisons). Jackson (1977), using 1972 NLS data, found no direct effects of parental income on college application or attendance after controlling for other aspects of SES and student and school characteristics. Kohn and associates (1974), calculating a "pure" income effect (controlling for effects of availability and attractiveness of various alternatives), actually found a curvilinear relationship between income and college attendance. While in their model the probability of going to college was higher for students from middle- than from low-income families, the probability fell again for those from high-income families.

Some people have speculated that family income has an effect on a child's chances to continue in school through its effects on capital costs. The argument is that "Them that has, gets," that the cost of borrowing to finance a child's education would be less for those with higher incomes. There are differences in proportional amount borrowed for educational expenses by parental income. In 1976-77, middle income families borrowed about 15 percent of the cost of college, while groups with lower income borrowed about 10 percent (Froomkin 1978). Lazear

(1980:42), however, using 1975 data from the Parnes young men sample found that "with 95 percent confidence the poor face borrowing costs that are greater than those for the rich, but greater by an amount less than one-quarter of a percentage point."

Mare (1977:41) implies that some of the effects of parental income are indirect, through affecting previous school continuation. "Differences among the patterns of parental status effects is presumptive evidence that the social psychological benefits of higher socioeconomic origins are most important at the highest schooling levels, while economic benefits afford greater advantages for grade progression in pre-college years."

Looking at the issue of money from the perspective of continuing in college, Jencks and others (1972:162-163) cite studies in which about one-fifth of the respondents replied that they dropped out of college because they could not afford to continue. This, however, is not conclusive evidence of the importance of money on college continuation since financial problems may be only part of the reason for dropping out; and those who continue may have money problems but find other aspects of their college activity rewarding enough to continue. Parental income per se may have no effect on dropping out. In terms of transferring (NCES 1977a), most transfers are between colleges with similar costs (in terms of tuition and fees). However, about a third of the transfers from four-year colleges are from high- to low-cost colleges, with actually greater proportion of high SES students making this sort of move (perhaps because of an overestimate of their ability, since the more expensive colleges tend also to be more selective).

It is actually not too surprising that the direct effects of parental income are small or nonexistent. The financial contribution

of the family to a child's postsecondary education depends not only on income at the time the child is graduating from high school, but also on the parents' willingness to contribute, on their overall economic well-being, on their past economic circumstances and expectations for the future, on the number of other children, and on any planning they have done for their child. (See discussion in Longanecker 1978 on the usefulness of after-tax income for measuring ability to pay for a child's education.) Further, given the range of costs of colleges and other schools, parental financial contribution may affect choice among schools more than actual school attendance, even allowing for financial aid. Looking at income elasticity--the change in demand for education with changes in income--economists have found that there is an increase in demand for education with increasing income and that the income elasticity is greater in the private than in the public sector. With rising family income, there is a tendency to buy more private postsecondary education (Corrazzini et al. 1972, using Project Talent data and a sample of Boston high school students; Hight 1975; Wolfi et al. 1978). To the extent that financial aid is negatively correlated with income, as is the tendency, differences in parental income effects are largely wiped out. Financial aid will be explored further in the next section--since receipt of financial aid depends in large part on the structure of outside agencies (see also Olson 1979, in Coleman et al. for a direct focus on financial aid). The following sub-sections examine some of the conditions within the family limiting or modifying effects of parental income on planning and activities for after high school.

2.4.4.1. The Demographic Squeeze

As previously cited, the number of children in a family affects whether parents intend to send their children to college (Jaffe and Adams 1964, from 1959 public opinion poll). One factor that recently has affected the ability of parents to contribute toward their children's education is the "demographic squeeze" of the mid-1970s. More families than ever before now have more than one child in college (or of college age) at the same time, even though family size has decreased. Families with more than one dependent in college full-time have increased from 13.1 percent of the total families with any children in college to 15.0 percent. Of families with income over $25,000, one in five has more than one person in some postsecondary course. Nelson and others (1978) note that 47 percent of all filers for financial aid in 1976-77 had multiple family members in college. Further, a larger number of families now support children in graduate school as a result of the decline in graduate stipends (Froomkin 1978). This is likely to change in the next few years, since the next groups of students are more widely spaced than the current generation of college-age people. One might speculate, however, that the changes in family composition that lead older women to return to school might have some small effect on the number of persons per household in school in the future. A 1975 General Mills survey of American families--not all of which had children--found one-fifth to one-quarter of the adults interviewed aspiring to continue their own education (Yankelovich et al. 1975).

2.4.4.2. Planning for and Willingness to Pay

The extent to which parents are willing to help pay their child's postsecondary expenses and the extent to which they plan ahead to make

such payment may have effects on the child's plans for after high school that are not represented by income alone. Most parents say they are willing to contribute to their child's education. In a 1971 survey of Ontario students and their parents, Porter and others (1979) found that 85 percent of the parents expected to help support their child in post-secondary education (97 percent of high SES parents, 73 percent of low SES parents). However, a large proportion of parents had not planned for this expense. Less than 50 percent of parents in the Ontario study, in all but one SES level (the next to the highest), had made any financial plans with respect to their child's education. At the same time, about 50 percent of all students expected to receive support primarily from their parents, with summer work the next most important source of funding. Comparisons with U.S. studies from the 1950s and 1960s are appropriate, given the lower cost of education in Canada. In a 1959 Roper study of the college plans of parents with children under 18 years of age, not in college, parents planned to pay 70 percent of college costs. However, in their estimates of future costs, parents did not allow for increases in costs. Most parents expected to use a variety of sources to finance college expenses. Sixty-seven percent said they would use their savings, 29 percent would use current income, 41 percent hoped their child would get a scholarship, and 28 percent expected the child to earn part of his/her way through school. However, only 40 percent had a savings plan for college, with median savings of $150 a year. As the time for the child to go to school approached, more turned toward current income as a source of funding. For parents of 10th to 12th graders who expected to go to college, 48 percent planned to take care of college costs out of current income, compared with 43 percent of parents of 7th to 9th graders. Another 1959 survey, undertaken by the

Economic Behavior Program of the Survey Research Center, also studied parents' financial plans and contributions (Lansing et al. 1960). Again, although most families knew well in advance that they would like their children to attend college, only half had funds set aside which they could use to help pay for their child's education. Those who had set aside money had done so an average of ten years before, though there was no one stage of the life cycle at which they tended to set up such funds. Not surprisingly, families with higher incomes and families with fewer children were more likely to have saved. The most common form in which money was set aside was in savings accounts or government bonds. One-tenth had money in common stocks, and a few had invested in real estate. Lansing et al. found evidence of increasing proportions of families saving through endowment insurance—12 percent of those with a child in college recently and 32 percent where the oldest child was in grades 7 through 12. A 1963 University of Michigan survey (Campbell and Eckerman 1964) found much the same. Again, 50 percent of those who expected to send one or more children to college had something saved, including two-thirds of those with children aged 17 and 18. For those who had saved, the average saving was $378 (compared with about $2,000 estimated cost); 80 percent had saved money from their own income, with the rest coming from gifts or inheritance. Endowment policies and insurance were the form of savings for 42 percent, savings accounts for 37 percent, savings bonds for 15 percent, and corporate stocks for 10 percent. Forty percent of those who saved for education in the year before the survey admitted that they might use the money for purposes other than education. For the entire group of parents expecting to send at least one child to college, the average amount of savings for the

year prior to the survey was $162. Saving was least likely among those with the lowest income and the least ability to finance education out of current income.

In the Lansing study (and in another study in Florida at about the same time, which was reviewed by Wattenbarger 1971), parental contributions paid more than half of the cost of college, and scholarships, student earnings, and other sources took care of the rest. However, the correlation between family income and what was spent on college was only .3. Most parents contributed something. These funds were derived from a number of sources. About half of the families with children in college in the five years up to and including the time of the study were able to draw on funds set aside as discussed. In one in five families the mother took a job to help with college bills, and in 8 percent of the families the father took on extra work. Forty-four percent reported that they paid for college out of current income by reducing expenditures or living on a tight budget. Fourteen percent of the families borrowed, and 8 percent received a gift or inheritance. In three-tenths of the families, parents felt their contribution could have been more, but most felt they gave what was needed. Those more likely to feel they could have done more were those with lower income and no savings. Four-tenths of the families felt it difficult to meet the cost of education, two-tenths that it was both difficult and that what they had saved was inadequate. Borrowing to pay for college was associated to strain. Borrowing tended to be by the family rather than by the student (this was before student loan programs), suggesting an acceptance by the families of a responsibility to educate their child. (Still, over half of the students contributed from their own savings.)

Spaeth and Greeley (1970) studied the 1968 wave of a panel study of 1961 college graduates whose parents probably thought the way those interviewed in the 1959 to 1963 studies did. These people had fairly high-level occupations and incomes. Within this group, 93 percent expected all their sons to attend college, and 86 percent expected all their daughters to go. Sixty percent had taken some concrete financial steps toward preparing for college expenses, and 99 percent said they would make some contribution. Half reported that they would pay at least three-fourths, estimating a cost of $3,000. Eighty-two percent said very high academic standing was of great importance in choosing a college for their child, only 12 percent said low cost was of great importance. To compare student attitudes with these parent attitudes, one can turn to the SCOPE data. When 11th graders were asked in 1968 if they had saved for education after high school, 25 to 50 percent (depending on educational aspirations, sex, and state) of those planning to go beyond high school expected their parents to take care of it (CEEB, 1968).. Of course, these students came from a wider range of backgrounds than the people in the study of the 1961 college graduates.

A national survey in 1969 of college students who had been part of a national sample of high school juniors in 1966 (Haven and Horch 1972) showed that only 18 percent of the parents gave no aid and that another 13 percent gave $250 or less. The average annual contribution was $1,099. The level of parental contributions varied, as might be expected, by type of institution. Haven and Horch presented the following breakdown for parents who gave no aid: 17 percent of those with students in public four-year schools (26 percent for commuters), 12 percent of those with students in private four-year schools, 33 percent of those with students in public two-year institutions, and 17 percent

of those with students at other institutions. The percentages of parents giving over $3,000 were 3 percent for four-year public schools, 19 percent for four-year private schools, 1 percent for two-year public schools and 6 percent for other institutions. Though the amount of parental contribution is clearly related to the type of institution and probably to costs, the direction of causality cannot be judged from these cross-sectional data. Choice of institution may have been made on the basis of expected parental contribution, parental contribution may have been generally made equal to need, or there may have been a combination of the two. (See Haven and Horch also for a breakdown of other sources of financing by type of institution, sex, race, and commuter vs. non-commuter status.)

Over the years, the proportional contribution of parents to college costs has gone down, and student earnings and other sources of funding have become more important. Parents, on the average, financed less than half of average college costs in 1975-76. Between 1969 and 1975-76, for cost increases of about $1,100 per full-time dependent student, parental contribution increased only $246, so that the share of college costs by parents declined by 8 percent. The share from grants and loans during this period increased about 7 percent (Froomkin 1978). The needs-based nature of much aid is perhaps reflected in the association of actual parental contribution to students who do go on in school with parental income. Froomkin (1978:260) reports that "in 1976-77, on the average, parents with incomes under $7,500 did not need to contribute anything to defray the academic and living costs of their dependents. Parents with incomes between $7,500 and $12,000 contributed an average of $748, less than one-fourth the cost of the academic year. The contributions

of parents with incomes between $12,000 and $15,000 increased to $1,096; between $15,000 and $20,000, $1,905; and those with incomes greater than $25,000 a year averaged $2,672." With the increase in needs-based aid, many connected with the legislation and administration of financial aid programs have expressed concern that parents are not planning for or willing to make the contributions that are expected from them to complete the financing of their children's postsecondary education.

Analyses of contributions from parents of students who filed for aid shed additional light on the contributions of parents whose children feel the need for financial aid beyond their own earnings and family support. As Davis and Van Dusen (1978:36) emphasize, "In all needs analysis systems, the key factor is the determination of ability, rather than willingness, to pay for educational costs." The financial aid formulae generally assume that parents will contribute something and base other aid on an expected contribution. In a 1972 study (McMahon and Wagner 1973), 25 percent of the parents contributed nothing, 10 percent contributed under $150, and another 11 percent contributed $150 to $299. Nelson (1974), also using data from 1972-73, found parents contributed about half of what needs analysis expected but about 95 percent of what, on the average, was necessary to meet student expenses at various institutions. Pierog (1976) found differences by income in whether students received expected parental contributions: low-income students were more likely than high-income students to receive the expected contribution. (These last two studies are reviewed in Davis and Van Dusen 1978.) A 1976-77 study of families who filed the Parents' Confidential Statement of Financial Aid Form, using a sample similar to that of McMahon and Wagner, found less parental willingness to contribute. As Nelson and his associates (1978) point out, this sort of

selection is biased toward families with lower income and fewer assets. In fact, the sample Nelson et al. used had lower income and fewer assets than the families applying for aid in the previous year (Nelson et al. 1978:71). Here the mean amount offered by parents, according to the needs assessment documents, was $422, an amount below that calculated using either Consensus Methodology (CM, for which expected contribution was $762) or Basic Grant (BG) methodology (with mean expected contribution of $1,293). Nothing was offered by 54.3 percent, compared with an expected contribution of nothing from 47.0 percent using CM and 26.1 percent using BG methodology.

In the Nelson et al. (1978) study, willingness to contribute varied with income as well as with assets, debts, and years of school. Among those with incomes less than $6,000, 80.6 percent said they were willing (or able) to contribute nothing. Among families with incomes over $24,000, about one-sixth said they would contribute nothing. Families owning businesses or farms, two-parent families, parents owning homes or other non-farm/business assets, and those with fewer children were more willing to contribute something. As income increased, the percent willing to contribute what was expected decreased, and the gap between willingness and expected contribution increased. Differences between expected and offered contribution did not decrease when student contribution and costs were controlled. Also, while parents of freshmen were somewhat more likely than parents of previously enrolled students to offer something, they were less likely to offer as much as expected. There were small indications that, in general, those seeking access for their child to postsecondary education were more likely to do what was expected, controlling for costs and student contributions, than those

whose child was continuing. One reason for the gap between expected and offered contributions has to do with the way expected contribution is calculated. Parents thought that the way in which their assets were treated in the needs calculation did not give a realistic picture of their ability to contribute to their child's education. They were especially reluctant to use home equity to finance their children's education.

It is not clear to what extent this gap deters students from entering any college, entering the college of their choice, or continuing in school. (See also section III B in Davis and Van Dusen 1978 for a discussion of literature on needs analysis.) Students whose parents cannot or will not contribute might be in difficulty, despite the availability of new kinds of aid. This is one reason for the independence issue. Some students argue that it is not their parents' responsibility to provide their education and that their needs should be assessed on the basis of their personal incomes alone. It is often difficult to be declared independent for financial aid purposes, since there is a strong presumption in the aid programs that families should provide for their children's education. This again raises the issue of who benefits from postsecondary education and who is responsible for providing it. Should students be punished for having uncooperative parents, or should we let students from rich families get aid when they could afford to pay their way?

Obviously, general economic conditions will affect a family's economic position and ability to help a child with the costs of postsecondary education. In the 1975 General Mills survey of American Families (Yankelovich et al. 1975), aspirations for a college education for the child varied with the parents' perception of their relative economic

position: 53 percent of those who said their standard of living was better than last year, 43 percent of those who said it was the same, and 46 percent of those who said it was worse expressed aspirations for their child to go to college. Overall, 56 percent of the families had some savings (again, not all of the surveyed families had children), but only 26 percent saved regularly and 24 percent had dipped into savings to meet current expenses. People feeling the crunch of inflation (or having unexpected expenses) may deplete or reduce any savings they have accumulated for their child's education. In any case, only 17 percent were saving for their child's education, while 70 percent said that they were saving for an emergency (more than one answer could be given). One conclusion of the survey was that Americans are "psychologically ill-prepared for hard times." "Two decades of relative economic stability and rising affluence have created an environment in which many things once considered luxuries are now taken for granted." Fifty percent of the American families felt that the government has the obligation to provide each family with work and a good standard of living. A majority, in 1975, felt things would continue to improve financially. Among those who were not optimistic, about half felt that they had the right to an improved standard of living each year, and about half felt the economic situation was no longer under their control. The economic situation may affect ability to pay educational costs, and attitudes such as these may affect willingness to pay.

The conclusions of Peng and associates (1977:6) about the effect of family background reinforce the evidence reviewed in this last section:

> . . . it is highly improbable that economics is the answer to persistent attendance differentials between high and low SES students. Whether or not one chooses to go to college apparently

depends more upon motivation, parental expectations, and one's own perception of the value of a college education, plus the kind of academic preparation obtained in high school. The class factor in college access is the end-product of a host of deficits that, in fact, probably begin to accumulate before a child enters first grade.

3. School and Community Characteristics

Other factors that might affect postsecondary education decisions and that exert their influence before and while the decision is being made are school and community characteristics. One way in which family background might indirectly affect a child's chances to continue schooling after high school is by affecting the type of schooling the child receives and the types of encouragement he/she receives from peers and teachers. At the same time, school and community might have effects independent of family background. Most community effects will show up as school effects. There are several different ways in which the school might affect a student's decision to continue schooling after high school: (1) through encouragement by teachers, (2) through counseling, (3) through the kinds of peers a student has, (4) through the quality and "normative climate" of the school generally, and (5) through tracking and courses.

3.1. Teachers' encouragement

Sewell and his associates (e.g., Sewell and Hauser 1975) have examined the effects of perceived teachers' encouragement. They found that the perceived teachers' encouragement was more affected by academic ability and performance than by socioeconomic origin, especially in contrast to parents' encouragement and plans of friends. A parental income effect on teacher's encouragement, though small, was present, however, and perhaps represents to a teacher feasibility of high education for a student. The influence of teachers, although based on more meritocratic

criteria than that of parents or friends, is less (about two to three times less) than the influence of parents and peers. Sewell and Hauser (1975:105) conclude that, "Far from reflecting overt or covert discrimination, teachers' expectations appear to be based on ability and performance, and as such, make a fundamental though modest contribution to the equalization of educational opportunities."

3.2. Counseling

Counseling may affect both aspirations and also knowledge of alternatives (the latter topic to be discussed later). The effects of counseling in high school appear to be small. This is unfortunate since counseling could be manipulated. Bowers and others (1977:143), using the NLS72 data, conclude that, in contrast with significant others (such as parents), "high school counseling programs show only slight and restricted effects on postsecondary attendance. They definitely contribute to students' awareness of postsecondary opportunities, but such awareness plays a relatively minor role among the determinants of postsecondary attendance by most routes and to most destinations. The exceptions are in immediate attendance at vocational and technical programs and, to a lesser extent, at two year college programs. . . ." Bowers et al. go on to suggest that the potential effect of counseling could be realized by having counselors deal directly with significant others, such as parents, in the decision-making process. With respect to awareness of occupational opportunities, Mott and Moore (1976) and Parnes and Kohn (1973), both using Parnes data, found that the number of counselors in the school seemed unrelated to occupational knowledge for both males and females (as measured by a test asking for the description of the typical education level and the income of ten occupations). Although

this is consistent with the results on influence of counseling on post-secondary educational plans, the measure of counseling was not one of direct contact, and some of the items on the test were rather esoteric.

3.3. Peer Networks

The effects of peers have been studied at the aggregate and at the individual levels. The Wisconsin study asked about the plans for college of the students' friends. Analysis of these data show an effect of friends' plans on the students' educational attainment of a magnitude equal to that of the parents' aspirations. The plans of friends were affected by the students' socioeconomic background as well as by the students' grades (Sewell and Hauser 1975). Jackson (1977:6.24) found that the effect of friends' plans varied with the students' grades: "C students seem to be particularly sensitive to their friends' and classmates' plans: a C student whose friends are mostly going to college is 11.4 percentage points more likely to do so as well." Alexander and his colleagues (1979:223) list further references that support the idea that what a person's friends are planning to do is important for what that individual is planning to do. Kerckhoff (1971), in comparing models of educational expectations for 6th, 9th, and 12th grade boys, notes, though, that the effects of friends' expectations are not apparent until boys reach the beginning of high school.

3.4. Quality and "Normative Climate" of School

There has been considerable speculation that the average characteristics of the student body also affect achievement. Such effects, however, have been hard to find. Jackson (1977), for example, found no effect on whether a student applied to college of the percentage of

a student's school going on to college and only a very small effect (less than half of the effect of friends' plans) on attendance (1977:Table 9). Sewell and Armer (1966) likewise found little effect of average SES. However, Bishop (1977:300), finding a similar effect of average neighborhood income on entering college, interprets the effect as a large one.

Alexander and associates (1979) looked directly at school normative climate (as extracted from student and teacher questionnaires administered in twenty public high schools in 1964 and 1965), with the normative climate characterized as more or less oriented toward academic excellence. Though earlier research found an effect of this variable, Alexander et al. found that when student characteristics and friends' plans were included in the equation, normative climate had no significant effect on students' educational plans. In fact, no measure of average student characteristics (mean sex, mean SES, mean ability) had an effect. Jencks and others (1972), in a review of research on school socioeconomic and racial composition effect, reached the same conclusion: the school effects are not there.

The contextual effects of school might have to do with more than the characteristics of students in the school. The effects of differences in "quality" in terms of expenditure and programs have also been a concern since socioeconomic background may affect residence in places with schools of varying quality as measured in these terms. Jencks et al. (1972), with Project Talent and EEOS data, estimate that no more than about 2 percent of the difference in educational attainment is accounted for by differences among schools in their resources, and that most of the apparent differences are due to differences in students that exist at the time they enter school (e.g., effects of socioeconomic

background and I.Q.). Jackson's results are consistent with this, with his measures of school "quality" being more of academic and vocational programs offered than financial resources. (See Byrne and Williamson, 1972, for a discussion of the English situation.)

The search for school effects has been going on for quite a while. One argument for the lack of success in this search is that the methodology is incorrect (Wiley 1976). In contrast, Nelson (1972) and others (e.g., Alexander and Eckland, 1975; Jencks et al. 1972) suggest that the effects of school composition are more complicated. At any level of intelligence, going to a high-status school may increase college aspirations, one predictor of college attendance, but lower the student's class rank, another predictor. The two net effects may essentially cancel each other out. Further, Alexander and Eckland (1977) found an effect of high school status on <u>where</u> one went to college: at least for boys, going to a high-status high school somewhat increased the chances of going to a selective college.

3.5. <u>Curriculum Placement</u>

Unlike the previous school variables, curriculum placement, which impinges more directly on the student, does have an effect on the post-secondary decisions a student makes (see analysis in Alexander et al. 1979). Bowers and others (1977) emphasize that not only being in a non-academic track depresses the chances of college attendance, but also being in a general or vocational high school curriculum tends to impede postsecondary school attendance both immediately after high school and later, and that it even hinders continuing in a program. And these effects appear even for attendance at and continuing in two-year and vocational/ technical programs, the sorts of programs for which nonacademic

tracks might be thought to prepare a student (see also Peng et al. 1977). The impact of tracking may be through lower test scores, lowered self-esteem, and differences in peer contact (Alexander and McDill 1976). Jencks and others (1972:157-158) suggest that for anywhere from 5 to 20 percent of students, whether they go on to college is determined by where they are placed. This is "not the main explanation" for differences in attainment, they claim, but it is "not trivial." They suggest that being in a college track increases the probability of going on to college, while increasing the proportion of students in college preparatory courses does not increase the proportion of students who go on to college, ceteris paribus. In other words, if everyone were in college preparatory courses, the advantage would be gone.

The importance of curriculum placement has been mentioned before as one measure of a student's academic credentials (Thomas et al. 1979; Jackson 1977). Comparing the effects of curriculum (academic program/other) with those of class rank and test scores, Thomas and others found that for male and female whites curriculum had the strongest net effect on college access (in an equation with SES and the other academic variables), followed by scholastic aptitude. For blacks, curriculum and aptitude were about equally important. Curriculum placement was thus somewhat less important for blacks than for whites. "For those who maintain that such streaming restricts the educational options available to students, these results suggest that this is less the case for blacks. But for those who maintain the value of tracking in preparing for college those students destined for college, blacks are less likely to benefit from these practices than are whites" (Thomas et al. 1977:147).

Given the potential importance of tracking for college access (see discussion in NCFPE 1973), one can ask what causes placement in

one track versus another. Thomas and associates found no sex differences but moderately strong SES and race effects on curriculum placement. Whites from higher SES families were somewhat more likely to be in academic programs than lower SES whites with the same ability. Among blacks, SES was not a strong determinant of placement. Blacks were somewhat more likely to be in academic programs than whites of the same SES and aptitude. Jencks et al. (1972) found the same thing with EEO data. Morgan and others (1979) also found some effects of SES (father's education, number of siblings, father's occupation) and parental values on curriculum placement, more for whites than blacks. For both groups verbal ability is a relatively strong predictor of placement.

None of these studies controls for aspirations, so it is possible that students select into academic programs because of their goals (which are influenced by their SES). Jencks and his colleague, using EEO data, argue that preference seems the most important determinant of placement, being even more important than academic ability. In northern high schools, 84 percent of the seniors said they were in the program they wanted: 90 percent of those in college tracks wanted to go to college, and 62 percent of those in noncollege tracks did not want to go to college. (But see also discussion in Alexander and McDill 1976.) However, it is not clear to what extent aspirations beforehand led students to select into a given track and to what extent aspirations are a result of being in a given track. Experimental evidence suggests some response on the part of the student to expectations teachers have for students differentially placed (see especially Orne, ch. 5, Rosenthal, ch. 6, in Rosenthal and Rosnow 1969). Jencks concludes that SES did not play a role in curriculum placement, after controlling for test scores. Differences

in results can be due to differences in controls, since so much of the SES effect is indirect. In any case, social background seems to be coming in again as it influences aspirations and test scores, which in turn affect curriculum placement. (See also Heyns 1974 and Rosenbaum 1980.)

4. Alternatives Open After High School--
The Structure of Opportunity

Whether or not a student goes on for schooling beyond high school depends on more than his/her ability, academic credentials, family, and school background. It depends as well on the nature and costs of the opportunities open at the time the student makes the transition from high school to other activities. Getting a job, getting married, or joining the armed forces are some of the alternatives to going to school. These activities, of course, are not mutually exclusive. Further, to the extent that they are alternatives to schooling, they may be only temporary alternatives, with a later decision to continue on to school. Even when the decision is to continue schooling, the location, costs, offerings, and admission criteria of different types of schools are important. Government policy with respect to financial aid affects the cost of schooling for different groups of students, and the general economic and political climate also affects the costs of various alternatives.

Nolfi and others (1978:135), building on work by Radner and Miller (1975) and Kohn and associates (1974), incorporate this sort of thinking into their model of post-high-school choice: "Our basic behavioral premise is the assumption that graduating high school seniors face a set of possible educational and work alternatives and that, among those available, they select the one they most preferred at the time. We also assume that individual valuations of alternatives can be thought

of as functions of measurable attributes of alternatives and of characteristics of individual decision-makers." They hypothesize that the alternatives available are college, vocational programs, full-time work, part-time work, part-time school, military service (for males), and homemaking (for females). The quality of the alternatives are measured through students' academic ability, tuition and fees, room and board costs, transportation costs, financial aid, alternatives' income, and family income, race and sex. Some of these factors have already been discussed with respect to individual and school characteristics.

This is an ambitious model. However, it appears to be limited by its focus on one decision out of many--that at the time of leaving high school. Nolfi et al. (1978) recognize this limitation. One problem with this focus is that it does not adequately take into account earlier decision-making. Jackson (1977) found that over half of the students studied applied to only one institution, and that some showed up in college in the fall after having said in the spring that they had not applied. Some choices had been made, then, by the time many of the students finished high school. And some people never made a decision to apply at all. (But see also Pp. 20 and 22 in Corwin and Kent 1978, where Henderson reports finding that students make a greater number of applications.) Weathersby (in Corwin and Kent 1978) comments that "the preselection process . . . probably takes place in the seventh or eighth grade, when students or their counselors decide whether the student will be in the college preparatory track." At that stage, they may have little information about the conditions that will hold in five years. At the same time, perhaps because of the processional nature of the postsecondary education decision, Jackson (1977) was able to predict 85 percent of the postsecondary educational decisions without reference to exogenous

variables such as institutional pricing or financial aid (79 percent when aspirations were ignored). (This may simply reflect, however, as McPherson suggests in Corwin and Kent, p. 47, the greater variance in student characteristics versus institutional characteristics.) Yet, much of educational policy focuses on aspects of the alternatives structure at the time of college entry.

Focusing on students' decisions as they leave high school also misses decisions made later to enroll in some form of postsecondary education. Delayed entry to college is also increasing. About 5 percent of the NLS 1972 graduates delayed entry to a two- or four-year college until 1973 (Peng et al. 1977). In general, the same factors leading to college entry immediately after high school also affect delayed entry. "That is, academic curriculum, academic aptitude, and rank in high school class are among the high correlates of college entry, whether delayed or immediate. Also, in both situations, the influence of social class, parents, and peers, as well as the level of education the respondent desires, all have modest but significant independent effects on college attendance." (Peng et al. 1977:5) More and more high school students since 1973 have been delaying entry to college. Henderson and Plummer (1978:Exhibits 9, 10, and 25) show that, among the freshmen entering college in 1973, 61.8 percent were entering the same year as high school graduation and 17 percent were entering five years or more after high school graduation. In 1976, 54.8 percent of entering freshmen were in their first year after high school graduation, and 19.4 percent were five or more years from high school graduation. In looking at withdrawals, NCES (1977) found many (one-fourth to one-third) of those who withdrew from four-year schools planned to reenter in another year, while another

one-fifth to one-fourth planned to reenter after two years. Also, more students are combining alternatives, going to school part-time. Further decisions are made at each stage of the college career--whether to continue, drop out, go full-time or part-time--and at each of these stages the alternatives available, as well as prior preparation and background, have an effect. To understand the problem of access to higher and other postsecondary education, we need to understand the whole process of decision-making. The research cited, unfortunately, is usually from information on one cross-sectional decision.

4.1. Noncollege Alternatives

4.1.1. Employment

An obvious alternative or complement to college is taking a job. One cost of further education is the opportunity cost of earnings foregone while in school. For some students, this cost will be too high to allow them to go on. In a 1971 survey of Ontario students who were not planning to continue in school, 68 percent said, "I want to get a job and earn money as soon as possible" was an important reason. This answer was somewhat related to social class, with fewer of the highest class vs. lowest class (61 vs. 72 percent) giving this as important. This could be related to the opportunity cost of college but might also represent a desire to be independent (Porter et al. 1979:129).

Nolfi et al. (1978) included expected annual income as one measure of alternatives. The effect of expected wage if work were taken as the option after high school was considerably larger for low-income than for high-income groups. However, this variable, while it appears to influence choice, had an effect which was small compared with that of

cost and aid. (See ch. 9 of Nolfi et al. 1978, for analysis of the effects of labor market conditions on the demand for postsecondary education.) Peng et al. (1977) reported research showing that those with higher earnings are more likely to delay college entrance.

Duncan (1965) found a relationship between staying in high school and general unemployment rates. Weak market conditions may be a factor in the decison to continue with schooling after high school, to delay entering such a market. Indirect evidence for the effect of employment opportunity on the decision as to whether to continue in school comes from Radner and Miller's (1975) finding that among low ability students, those with higher ability are less likely to enroll in some postsecondary education. Radner and Miller speculate that for this group the returns to further education may be less than the returns from employment. Considering such results, Thomas DiPrete (private communication) has suggested that one way in which blue-collar or self-employed parents affect their children's educational choices is by offering them easy access to jobs, which reduces search costs and perhaps makes schooling a less attractive option.

In some cases, employment could facilitate later postsecondary education off-the-job. Henderson and Plummer (1978:11) point out that under the Revenue Act of 1978 an expanded number of employees can use tax-free tuition benefits provided by employers. However, although the vast majority of companies have such programs, only 4 to 10 percent of workers participate, perhaps because of lack of knowledge about the programs' existence.

More than immediate work opportunities are involved in decisions about whether to continue schooling after high school. Human capitalists

see schooling as an investment that should bring increased returns in the form of higher earnings afterwards. Students, if they are economically rational, will decide whether to make this investment by comparing the present value of returns to education (usually in the form of increased post-schooling earnings) with the costs (Thurow 1970).

In a spring 1972 survey of potential 1972-73 college sophomores, juniors, and seniors, McMahon and Wagner (1973) asked students, "If you dropped out of school today, what type of occupation or job would you most likely be working in?" In response, 9 percent said professional, 28 percent clerical, 14 percent sales, 16 percent service, and 10 percent laborers, a distribution different from that for college graduates.

When asked why they want to go to college, students often speak of career and earnings goals (e.g., Carmody, Fenske, and Scott 1972). When the returns to a college education in terms of occupational opportunity and earnings decline, students may decide the returns to the effort are not worth the cost (see, for example, McPherson 1978). Freeman (1976), for example, shows some response of college enrollments to the decline in advantage of college graduation. (For a recent discussion of returns to college, see Journal of Human Resources 1980.) In contrast, Bishop (1977), incorporating income for college graduates in his model of the probability of going on to college (using Project Talent data), did not find returns on a college education to be important. Choice of college might be affected by anticipation of different returns to degrees from colleges that differ in quality. For research on this question, see Solomon (1975), Weisbrod and Karpoff (1968), and Alwin et al. (1975). Solomon (1975) concludes that quality of institution does have an important impact on life-time earnings. However, the

mechanism behind this impact is still not well understood (see Layard and Psacharopoulos, 1974).

4.1.2. Military Service

The opportunities offered by and pressures from the military might affect the decision to pursue a college or vocational program after high school. On the one hand, the military has traditionally been seen as offering low-cost training to those who otherwise would have no chance to learn a skill. On the other hand, the political requirements of military needs can affect who goes to college. The decline in the proportion of men going on to college in the mid-1970s (Suter 1978) has been explained in part by the easing of the draft. During the Vietnamese War, until the lottery was instituted, being in college (or graduate school early during the war) exempted one from the draft. Further, being in certain occupations, such as teaching, resulted in exemption after completion of school. This encouraged men to enroll in school and discouraged them from dropping out, and it often altered their choices of schools and majors. At the moment, with an all-volunteer army, it seems that those taking advantage of the opportunities in the military are predominately black and of lower socioeconomic status. (See also Nolfi et al. 1978:ch. 9 and Lewin-Epstein in Coleman et al. 1979.)

4.1.3. Marriage

Being married may make it more difficult to go on with some form of postsecondary education. Further, marriage can be and can be associated with an alternative to continued schooling. For women, marriage may (still) represent an alternative full-time work role, and, for both sexes, marriage may be associated with a need for immediate income, with

the result that the couple takes jobs rather than going to school. Parental values can come into play here. Parents may feel that after high school the appropriate role, especially for a woman, is no longer that of student, but that of spouse. This attitude has been mentioned especially in connection with problems of college attendance for Hispanic women (see Nielsen 1980). Beezer and Hjelm (1961) concluded that marriage as a deterrent to further education affected women more than men and affected low-ability students more than those with high ability. In all, however, they found that marriage affected only a small proportion of the high school senior population. Bowers et al. (1978) found that those who married after high school were more likely to delay attendance than those who were single. At the same time, Davis and Bumpass (1976) document the considerable proportion of women who continue schooling some time after their marriage. Astin (1975) found that those who were married when they entered college had a good chance of completing college if the spouse provided major financial support. Being married with little or no financial support from the spouse increased the chance of dropping out. Astin (1977:216) discovered that women were more likely to get married during college, even controlling for marriage plans at college entry. "Getting married appears to be one explanation for women's slightly reduced chances of completing college."

Being married at the time of applying for some form of postsecondary education may reduce the chances of receiving financial aid. Over 830,000 students in some sort of postsecondary program are married. However, those administering financial aid still find determining married students' need and ability to pay problematic, since they are in a position different from that of the "typical" young, single student (see Davis and Van Dusen, 1978:71).

4.2. Postsecondary Educational Alternatives

There is a wide variety of postsecondary educational options, and the patterns of enrollment in the different sectors change over time. For example, between 1969 and 1975, full-time enrollment increased in all parts of the public sector, especially in two-year colleges; declined in non-selective private schools; remained constant at moderately selective schools; and increased in highly selective schools (Corwin and Kant 1977:14). What college and vocational school options are available (and availability may be subjectively defined) should affect the choice of whether to continue schooling, as well as the decision about which school to attend. Availability may involve distance, costs, financial aid, and selectivity. Further, students may have preferences for schools with certain special programs, or with certain types of student bodies (e.g., defined by sex, race, or religion).

4.2.1. Proximity

Distance is one way of evaluating availability. Proximity can affect availability in at least two ways, through both knowledge and costs. First, students may know more about schools in their areas, and such schools would be more "available" to students with that knowledge. Second, a nearby school may cost less to attend because of the possibility of commuting, of getting some services (e.g., laundry, typing, and vacations) at home, or of being in a position to find a better part-time job (see Anderson, Bowman, and Tinto 1972). Carmody, Fenske, and Scott (1972) found that 52.2 percent of the students interviewed in 1966 said "desirable location" was a major consideration in college choice, while in 1969 this was a major consideration for 46.6 percent of the

students. This suggests some decrease over that period in the importance of location, although "desirable location" can mean more than just proximity.

The discussion of distance is often in terms of community colleges. The increase in educational facilities has been largely through the establishment or expansion of junior and community colleges. One reason for the expansion in this sector is the belief that it increases accessibility, especially for the nontraditional student.

Although there seems to be a correlation between college attendance and geographical proximity (see review in Tinto 1971), one has to be careful about inferring a relationship between a given student's decision to go to college and the nearness of the college from research showing a relationship between community rates of attendance and location of a college. The general conclusion is that proximity is not a very important factor, when all else is taken into account. Anderson, Bowman, and Tinto (1972), for example, conclude that when one begins with measures of ability and family status, adding an index of accessibility essentially explains no additional variance. A further conclusion, however, is that there are important exceptions to the general conclusion.

One thing that must be kept in mind is that there is tremendous variation in the nature of the "local" college by state and region (Tinto 1971). In New England and the mid-Atlantic states, private four-year schools dominate. In California, there is an extensive state system, including many junior and community colleges with almost open admissions. In Wisconsin, the two-year colleges have tended to be teachers' colleges and extension centers, with admission requirements the same as those for the main campus of the University. Jackson (1977) found that the

number of colleges nearby had no effect on attendance, but did find differences by region. Students who apply in-state are 10.4 to 14.6 percentage points more likely to attend college if they live in the North-Central or Western states, 0.2 to 2.9 percentage points less likely to attend if they live elsewhere. Regional differences were stronger for low compared with high SES students.

Henson (in Corwin and Kent, 1978:21) looked at the choice among schools for those applying to more than one school. Students were more likely to enroll in their first choice school when it was closer. Students going to private schools went farther, but high-ability students went farther to both public and private schools. Bowers et al. (1977) found basically the same thing as Jackson, except in the case of predicting entry to a two-year college. Then ecological variables such as proximity of schools had a greater effect than academic credentials or disposable funds. Tinto's review includes the idea that when students reside in a community with a two-year college they tend to substitute attendance there for attendance at schools elsewhere, especially if they are low-ability or low-income students. Tuckman (1973), with data from Miami-Dade junior college students collected in spring 1970, finds that the reduction in cost from being able to live at home does increase the number of low-income students in college. He suggests that two sorts of students attend junior college: those who in the absence of the junior college would have entered the labor force (probably including those from low-income families); and those who have an inelastic demand for college but an elastic choice of school (including those from middle- and higher-income groups). (See also Bishop 1977 for discussion of the effects of proximity on costs and attendance.)

Kohn and others (1974) looked at the residency choice as part of the college-choice process and included distance to schools in their model. They found that the probability of college residency increased with distance, and that it was higher at each distance for those from higher-income families. Those from lower-income families chose to live at home more than those from higher-income families. Overall, the negative effect of distance on college choice was highest for the middle-income group. (Nolfi et al. 1978, using only two income groups, found that the negative effect of distance on college choice was greater for low- as compared with high-income groups.) In a simulation of the effects of a two-year college at varying distances from the student's home on the choice of a public university, going to a two-year school, or not enrolling, Kohn et al. find that "the two-year college stimulates enrollment only when it is at a distance at which its utility exceeds that of the close-by university," that is, at 20 miles for the particular situation they simulate (1974:378). Further steps show that the impact of the two-year college on public university enrollment varies over the distances to the two-year college.

Bowers et al. (1977) found that "the elaboration of the two year community and junior college system has a definite facilitating effect on postsecondary education whereas the same is not true for the elaboration of four year college programs. Evidently, the market for four year education extends beyond state boundaries."

4.2.2. Institutional Characteristics

Bower et al. go on in their conclusion to say, "Moreover, the effect [of two year colleges] is not strictly a function of proximity; there are strong direct effects of enrollment on attendance apart from

proximity." Factors such as low admission requirements and more relevant career programs have been brought forth as explanations beyond costs and proximity for increasing enrollments at two-year schools (e.g., Medsker and Tillery 1971). These factors—selectivity and programs offered—as well as characteristics of the student body, might be other institutional factors affecting the choice of what to do after high school, especially the choice of which institution to attend, once the decision to go on in school has been made.

Program offerings do seem to strongly affect choice. "Special curriculum" was a major consideration in choice among colleges for almost 55 percent of 1969 student respondents to the Student Profile section of the ACT assessment. In 1966, the percentage listing this as a major consideration was 53 percent (Carmody et al. 1972:25). Carmody et al. comment on their results: "Of the five factors discussed in the present report, special curriculum had the highest percentage of students indicating 'major consideration'. It was also the only factor with well over half of the responses in the 'major consideration' category for both of the years studied" (1972:25). A few years later, McMahon and Wagner (1973:27) showed 21 percent of the students indicating that "special curriculum" was the most important influence affecting their choice of college (from responses on a form filled out generally before students made their final choice). Kohn et al. (1974:28) found breadth of offerings (an index reflecting number of fields in which a bachelor's degree is offered) "had a positive coefficient showing that students preferred schools offering a wider choice of possible specializations. This preference seems to be stronger in the middle-income stratum than in the high and low strata."

The reputation of the university is another possibly important factor in choice of a college. Carmody et al. (1972) show a bit under one-third of the students in 1966 and 1969 mentioning "national reputation" as a major consideration. McMahon and Wagner (1973) found about 12 percent mentioning the quality of the faculty, scholastic standards, and the intellectual atmosphere as the most important influence.

The effect of ability on college attendance might be expected to be mirrored in selectivity as a factor in the choice of institutions. Some studies have included college selectivity and "quality" as a variable. Kohn et al. (1974) did find some small effects of the ability difference between a student and the student body as a whole on selection of a college. College revenue per student, another possible "quality" measure, had no effect. Jackson found that selectivity alone did not seem to determine attendance. Only about 10.2 percent of all applicants he studied (1977:6.2) were rejected; 3.3 percent were rejected by all choices and about one-third of these attended college anyway. Students applying to higher prestige colleges with higher average ACT scores were somewhat more likely to attend. Higher expenditures per student reduced attendance. School characteristics such as these explained only about 5 percent of the variance in attendance as compared with 23 percent of the variance explained by background, ability, and attitudes. At the same time, students did seem to match their abilities to schools. The sort of school applied to depended on background, ability, and plans (see Sandell and Johnson, 1977, for similar findings with respect to white women), but the sort of college applied to had little effect by itself on attendance. Bishop (1977:299), in his binomial logit model of college attendance, found what he interprets as substantial effects

of admission requirements on attendance, except for those from poverty backgrounds. As might be expected, the lower ability students would be most likely to respond to a lowering of admission standards. If states accepted all high school graduates, rather than half, Bishop's model predicts an overall increase in the proportion of high school graduates entering college of .038, and of .067 for the lowest ability quartile.

Another kind of school characteristic that might affect choice is the composition of the student body by such characteristics as race, sex, social background, and religion. Some students, at least, might choose to go to places where the average student is very similar to themselves or where there is the possibility of a "good" social life. The evidence available, however, indicates that this consideration is important for relatively few students. McMahon and Wagner (1973:27) found only 5 out of over 2,000 students mentioning "coed college" as the most important influence on choice. (Of course, since so many colleges and schools are coed, this aspect may not be a feature that discriminates among schools to any great extent.) Such factors might be more important with respect to parents' attitudes toward different options. However, Spaeth and Greeley (1970:83) found that only 10 percent of the college alumni they studied listed "the college gives a good religious education" as very desirable for the college their oldest child of the same sex as respondent would attend: 34 percent indicated this would be either very or somewhat desirable. The proportion who would like their child to attend a school with students of the same social background was 5 percent for very desirable and 35 percent for very or somewhat desirable. In contrast, 77 percent thought it was very desirable that the college give a good general education, and 48 percent indicated that it was very

desirable that the college give good career training. Parental attitudes with respect to student body composition could be more important in subgroups of the population that feel that they are in a minority position, especially those that negatively sanction out-marriage.

4.2.3. Cost and Financial Aid

It could be that one reason for the rather small direct effect of parental income on college attendance is that there is no uniform price for postsecondary education. Postsecondary education has a range of costs, and, further, the net cost of any particular option may be decreased by the award of financial aid. Students might tend to choose postsecondary education options on the basis of their costs, estimating what they can afford at least in part on the basis of family income. If this were the case, cost of institution and family income would be related, perhaps more than parental income and attendance per se. This relationship would be attenuated if there were a relationship between receiving financial aid and parental income. Then one would expect at least low-income students to choose their institutions (and whether to attend college or other school at all) on the basis of the net price, which would be affected by the receipt of financial aid. One might expect the effects of cost (total and net) and of financial aid to be important for both attendance and choice of where to attend school after high school.

Attitudinal data do not support this expectation to any great degree (Carmody et al. 1972). For example, among 1969 students responding to the Student Profile section of the ACT, 33.8 percent said that "low cost" was a major consideration in college choice, compared with 37 percent giving this response in 1966. In 1969, 25.8 percent said that an offer

of a scholarship or other aid was a major consideration, up from 18.7 percent in 1966 (although in the earlier year the question was only about a scholarship offer). In both years, of the five factors examined as important for college choice (distance, curriculum, cost, scholarship offer, and national reputation), the factor of scholarship offer received the highest percentage in the category "no importance." Attitudinal data, however, are notoriously unreliable. Further, no controls for family income, ability, receipt of aid, or other factors were made here. Therefore, we turn to studies that more directly examine the effects of costs and financial aid on decisions about postsecondary education.

4.2.3.1. Cost

Above, it was suggested that educational costs and parental income might be related. Jackson (1977) found that, net of financial aid and distance, the total cost of the institution to which a student applied did depend to some extent on family income, as well as on parental SES, student characteristics, and location. Also, although multiple applications by the same student tended to resemble each other, there was more variation in cost among schools applied to than in quality of the institution, perhaps because students were not sure of getting the financial aid they needed to make a given type of school affordable. Although Jackson found that some college characteristics affected attendance (though none affected application), he did not find cost among these factors. He concluded (1977:6-15) that "cost per se has no consistent effect on whether students attend college once students decide how costly a college they may apply to. If cost has a significant effect, it is to guide students' decisions where to apply rather than their decision where to attend, and therefore perceived cost is the (unavailable) variable of

interest." Cost had a significant effect only for middle-income students, who tended not to choose high-cost institutions. This result is consistent with the idea that it is middle-income parents who have more trouble financing their children's educations.

Looking at aid applicants and nonapplicants, Munday (1976, cited in Davis and Van Dusen 1978:124) found results consistent with Jackson's. He found "little relationship between choice and college costs and family income for either group. However, educational development (as measured by test scores) was shown to have a moderate and consistent relationship to choices of college; students who had higher scores tended to choose colleges that had higher costs." Cost will affect the choice of where to attend, given application, only if more than one application is made. Henson (reported in Corwin and Kent 1978) examined this situation. He found that, for those applying to public schools, the highest ability students tended to go to their first-choice schools when they were relatively cheaper, while, for other ability groups, cost had no effect. (In this study, schools among which the student would choose, in order, were recorded in 12th grade. The extent to which attendance matched choice was determined by looking at data on students when they were freshmen in college.) In the private sector, however, the higher ability students were unaffected by price differences, while students from the bottom ability level were more likely to go to their first-choice schools when they were cheaper (perhaps because of the association between cost and selectivity).

Various simulations have analyzed the relationships among family income, cost, and attendance. Kohn et al. (1974) included tuition cost and a term quadratic in tuition in their model. This latter term was

to compensate for their inability to include a measure of financial aid, with the rationale that high-tuition colleges are most likely to offer aid. Tuition costs were found to have the greatest negative effect on college-going for the lowest income group. This effect was smallest for the highest income group, and intermediate for those from middle-income families. The effect of an increase in tuition was steepest for low-income families, less steep for middle-income families, and least steep for high income families. The negative effect of room and board costs, for students living on campus, was higher for those from low- and middle-income homes. (There are some differences in the results when North Carolina rather than Illinois data are used.) In another model simulating choice of post-high-school activity, Nolfi et al. (1978) showed that the negative effects of tuition costs depended on the length of the program chosen. The negative effect of tuition costs was greatest for programs lasting less than a year, least for programs lasting between one and two years. They suggest that this variation might be related to the expected returns from the different types of programs, with the immediate returns from the one- to two-year programs perhaps the greatest, assuming that these programs are closely tied in to job opportunities. The effects of tuition costs were much greater for the low-income as compared with the high-income families. Living costs, though, did not differ in their effects by family income. Bishop (1977), using Project Talent data, found that tuition at the minimum-cost college available to the student had a major effect on attendance but that there were differences by both ability and income: extremes of the ability distribution were least responsive to differences in tuition costs, and those from low-income and moderately high income families were most responsive

to differences in tuition. On the basis of this, Bishop suggests that aiding the poor will raise attendance in postsecondary education more than aiding the able.

Tuckman (1973) looked at the effects of the presence of one type of "minimum-cost" school: junior colleges. His results have already been discussed in connection with the effects of distance, which may represent costs of living at home versus living on campus. Although he shows that families with incomes of $7,000 and over received 75 percent of the savings available to parents from children's being able to attend junior colleges and live at home, this was in part because this group had more children in school. He concluded that the presence of a commuter school affects the attendance of students from low-income homes.

Jackson and Weathersby (1975) summarize their review of the literature on the impact of cost on individual demand for higher education as follows: (1) individuals from low-income families respond more to cost changes in higher education than do individuals from middle- or high-income families; (2) at any income, increasing costs decrease the proportion of individuals attending institutions of higher education; (3) a change of $100 in the cost of higher education will, on the average, induce a change of 2.5 percent in enrollment in higher education, under 1974 conditions. In sum, cost has some effect, more for those with lower incomes, but the effect is not a very large one. (See also Hyde's excellent 1978 review which reaches the same conclusion.)

The effects of cost changes seem to vary by educational sector as well. Another general finding has been that the income elasticity of demand for higher education is greater in the private than in the

public sector. Increasing family income has been a factor tending to increase the private share of the higher education market. However, the decline in undergraduate private college enrollment relative to that in public institutions can be attributed to the rise in private versus public tuition, which has swamped the income effect. Cross-price elasticities have not been a big factor in distribution across institutions (Corazzini et al. 1972; Hight 1975; Jackson and Weathersby 1975). Considerable attention has been given to the effects of the tuition gap (the difference in tuition between private and public sector tuition) on choice (e.g., McPherson 1978; Corwin and Kent 1978). Middle-income families supposedly face a wider income gap, relative to the ability to pay, than low- or high-income families. In terms of a high- versus low-income dichotomy, there has been a stronger tendency for high-income families to substitute public for private education, since the higher income students are less sensitive to prices in deciding whether to attend, but sensitive to prices in deciding where to attend. Policies that try to raise attendance by cutting tuition across the board would be expensive and not very effective, since most of the students affected would have attended college anyway. The effect of such a policy would be more on the distribution among colleges and other sorts of institutions (Hyde 1978).

Some concern has been expressed about the changes in the costs of higher education in relation to those in family income. Discussions of the "middle-income squeeze" often assume that it is more expensive in relative as well as absolute terms to educate children now, such that those without very high incomes or assured access to financial aid are increasingly at a disadvantage. The evidence on this is not clear.

The after-tax incomes of families with dependents 18 to 24 years of age grew at about the same rate or slightly less rapidly than college costs from 1967 to 1976. This comparison can be misleading. Longanecker (1978) points out the difference between after-tax income and discretionary income. Discretionary income, he says, has risen faster than income per se. McPherson (1978), in contrast argues that, while the cost of private education may not have risen as a percentage of family income, the cost of private education may have risen relative to other things one might buy. However, Magarrell (1979) reported in the Chronicle of Higher Education that, in 1978-79, college cost increases fell below the general rate of inflation. One might then conclude with Longanecker (1978) that there is no evidence that the financial burden of sending children to college has been increasing.

4.2.3.2. Financial Aid

Government policy, at least recently, has focused on manipulating the cost of education not by affecting family income (e.g., through the tax structure) or tuition costs (e.g., by institutional subsidies) but through financial aid to the student. Leslie and Fife (1974:652) comment that "The financing of higher education through students is a recent though major trend in American higher education." The 1972 Education Amendments "established a new national policy for financing of higher education: grants to students were to be the new thrust (plus new emphasis on loans), and institutions were to get proportionately less aid directly from governments." The criteria for aid, the nature of the aid, and the amount of aid are all subject to policy decisions and are all possible factors affecting access to postsecondary education. The susceptibility of these factors to policy decisions, in contrast with the other factors discussed, makes them an important set of variables to investigate.

Both state and federal governments are involved in these decisions.

> Under the United States Constitution, it is the responsibility of the states to provide for the education of their citizens. The state exercises this responsibility with regard to postsecondary education by appropriating funds to establish and operate institutions and support financial aid programs which help students pay for the costs of education. Although the states still provide the largest amount of financial support to postsecondary education, the federal government, in the general public interest, has gradually increased its role and contributions. Federal contributions are made through special purpose and categorical grants and loans to institutions and through direct financial aid to students (Davis and Van Dusen, 1978:92).

The criteria for participation in different aid programs will determine the possible effects aid can have on the income-access relationship, on the ability-access relationship, and on the choices students can make. Aid will significantly change the income-access relationship only if aid is based on need. Until the 1960s, the federal government gave student aid on the basis of merit or past action (e.g., being a veteran or contributing to social security). Aid based on need, as a means of equalizing access rather than insuring access on the basis of merit, was part of the War on Poverty.

> The idea that poverty or need justifies federal help for college students was strengthened in the early 1960s, when the civil rights movement, the war on poverty, and the long-standing quest for federal aid to higher education came together in a string of new programs, notably the college work-study program (1964), educational opportunity grants (1965), and a second set of partly subsidized guaranteed loans (1965). In addition, the Social Security Amendments of 1965 extended benefits to student dependents (and survivors) of workers covered by social security.
>
> By the mid-1960s the lineaments of federal student assistance were reasonably clear. Three broad categories of people could look to Washington for help: the poor, who could not otherwise afford to matriculate; those pursuing particular disciplines and professions that the government wanted to emphasize or expand; and federal "dependents" of several types, ranging from army veterans to American Indians and the children of social security recipients (Finn, 1978:60).

The Basic Educational Opportunity Grants Program (BEOGP) (initiated in 1972) is a continuation of the emphasis on needs-based programs.

The Middle Income Student Assistance Act (MISAA), passed in 1978, extended the benefits of federal needs-based financial aid programs to middle-income families.

For needs-based aid, there must be a determination of need. Parental contribution relative to that expected under various methods of calculating need was discussed in an earlier section. The failure of some parents to make the expected contribution is a matter of concern to policy-makers, a concern that raises the issue of whether current needs analyses are actually giving a good sense of "need." At the same time, there has been a fear that liberalizing the needs schedule too much might result in a demand for aid that could not be met. (See section III.B. in Davis and Van Dusen 1978 for references on needs analysis issues.)

> Although some federal aid tends to be needs-based, more is not.
>
> But needs-based student aid constitutes only a small portion of the total federal and state commitment to higher education. At the federal level, need-based assistance totals about $2.5 billion, and there is probably about $1 billion of state student aid money targeted on the basis of need. In addition, however, anywhere from $15 billion to $18 billion in state subsidies have no need orientation whatsoever, and federal programs such as Veterans Administration and Social Security grants (neither of which is need-based) total about $6 billion (Francis, in Corwin and Kent 1978:59).

The magnitude of need-based versus other types of aid would affect the size of any effect of "aid" as a general category on higher education access.

The requirements of aid can also affect such things as choice of institution, either directly, by making it easier for students to use their aid at one type of institution versus another, or indirectly, by subsidizing one type of school versus another. Here there seems to be a difference between aid programs administered through the states and through the federal government.

> State student financial aid amounted to $829 million in 1978-79 and helped 1,242,000 students. . . . Although institutional aid is heavily weighted in favor of the public sector, state student aid is more helpful to the independent sector. While only 13 states offer direct aid to private institutions, 47 states conduct student aid programs, only 4 of which are restricted to students at public institutions. . . . A survey conducted by the Illinois State Scholarship Commission illustrates the importance of student assistance to the independent sector. The Commission estimated that without state student aid, private institutions in Illinois would lose nearly 18 percent of their enrollment (Olson, in Coleman et al. 1979:151-152).

There has also been concern that aid requirements and administration work to the disadvantage of students who prefer to enroll in programs lasting two years or less rather than four-year programs (e.g., articles cited in Davis and Van Dusen 1978). A further issue has been the discrimination through aid criteria against students attending less than full-time. Social Security and Veterans benefits both require that one be a full-time student, and "While student aid opportunities for students attending half time or more were improved by MISAA, students attending less than half time still are ineligible for federal student aid." (Olson, in Coleman et al. 1979; see Olson for further discussion of policy issues with respect to federal and state student aid.)

Given the diversity of aid and requirements, who actually receives aid? As BEOGs have taken care of an increasing share of the needs of lower income students, other aid (e.g., Supplemental Educational Opportunity Grant Programs, Campus Work Study) has been channeled to students with parents in higher income groups. Dependent students whose parents had incomes of $15,000 or more received little SEOG or CWS aid in 1974-75. By 1976-77, the same group claimed 8.9 percent of all SEOGs and 15.4 percent of all CWS grants to dependent students (Froomkin 1978).

It has been argued that loans will not be used by low-income students, perhaps because of attitudes rejecting indebtedness (Yankolvich

1975; Porter et al. 1979), perhaps because of problems in dealing with financial institutions. On the other hand, Froomkin (1978) has argued that middle-income families of European ethnicity are also averse to debt. Olson found that lower income students were less likely than middle- or high-income students to borrow large amounts, perhaps because of the lower costs associated with the schools they had selected. Yet lower income and minority students were more likely to participate in federal loan programs. Minority students (black and Hispanic) were slightly more likely to use National Direct Student Loans (administered by institutions) relative to Guaranteed Student Loans (administered by private lenders) than whites (Olson, in Coleman et al. 1979, using NLS 1972 data). Davis and Van Dusen (1978:52) cite one study by Schlekat, done in 1968, that found that lower income students were more likely than middle-income students to get loans and work, rather than grants, in their aid packages.

Peng et al. (1977:6) summarize a study by Riccobono et al.:

> Just over a third of the NLS students who enrolled in some form of postsecondary education in 1972 received some form of aid other than family and personal support. About half of the aid came from Federal sources. . . . Those from lower income families, not surprisingly, were more likely than students from higher income families to receive both non-Federal and Federal aid, but particularly the latter. Ability, on the other hand, was positively related to receiving non-Federal aid for four-year college entrants, while negatively related to receiving Federal aid. That is, more students in the lower ability quartile received some form of Federal support than those in the upper ability quartile. This is probably the result of the correlation between ability and SES: Those with greater financial need (i.e., low SES) have lower test scores.

Jackson concludes with respect to his work with a model predicting amount of aid received (1977:6.13): "Few of the effects are large--for example . . . Black and Mexican-American students receive an average of $94 more aid than otherwise identical average students; students in

academic track receive an average of $30 more aid than otherwise identical students in other tracks. Students applying only to private colleges receive an average of $82 more aid than otherwise identical students applying only to public or religious schools. In sum, Aid (Some or Total) is no more strongly related to background, achievement, and attitudes than any other college characteristics." (This analysis includes those receiving no award and those not applying for award, but Jackson reports that excluding those with zero award does not change the results.)

Financial aid, therefore, does not seem to be an important mediator of the effects of family economic position on postsecondary schooling decision, given its low association with economic position. It is still possible, however, that aid has an effect on college access and choice. Hyde (1978:36-37), in his review of the literature on the effects of tuition and aid, finds that two general results of research on these effects are as follows: "The first is that a large proportion of aid recipients say they would not attend without the aid." But, "Second, the effect on enrollment of receiving aid is less than the effect of a change in tuition."

Receiving aid seems to have at least some effect on whether a student goes to college or university at all. Leslie and Fife (1974) did a survey of first-time state grant and scholarship recipients in four states, with additional information on students from a fifth state. They found that, on the average, 42 percent said that they would not have been able to attend college without aid. (See Corwin and Kent 1978 for a brief discussion of the validity of such responses.) The average amount of aid for a state seemed related to the percentage of students in the state saying they would not have been able to attend without the grant or scholarship. At the individual level, the correlations between

amount of aid and saying aid was needed to attend at all was about .22. There was some individual relationship between the amount of aid offered and attendance, but a small one (R^2 of about .05). Consistent with Leslie and Fife, Jackson (1977), using the NLS 1972 data, found that receiving some aid "increased the likelihood the average applicant would attend college by about 8.6 percentage points. This effect was somewhat larger for low-SES students, those with poor grades, or those from North-Central states. Surprisingly, once the offer per se was taken into account the amount offered had little impact." Other studies have also failed to find an association between amount and type of aid and matriculation (Davis and Van Dusen 1978:124-125). Nolfi et al. (1978), however, found that student enrollments were responsive to presence, level, and type of aid. Jackson went on to show that when it came to deciding between two colleges receiving some financial aid had a large effect. "Here financial aid had an apparently larger effect: a college offering aid was over 20 percentage points more likely to be chosen by an applicant than others admitting the applicant but offering no aid, controlling other differences. This large effect was mitigated by the fact that applicants rarely received aid from one college but not from others admitting them. Amount of aid was still not significant."

Receiving aid is also related to type of college chosen. Aid seems to narrow the tuition gap between public and private schools for low-income students. In some cases, given the structure of financial aid, what might seem the least expensive option (e.g., a community college) is actually the highest priced option when financial aid is included in the calculation of net cost (Corwin and Kent 1978). Jackson (1977) found the amount of aid was correlated with college cost, but,

controlling for other variables, there was a small effect on college cost only from receiving some aid, not from the amount received. Leslie and Fife (1974) found that aid recipients were somewhat more likely to be going to private colleges than all students as a group. They pointed to this as especially remarkable given that these recipients are probably less likely to have chosen private colleges to begin with. They were less likely to go to two-year schools and more likely to go to universities and small institutions. Self-reports of choices also indicate that students who would otherwise have gone to public schools were able to go to private schools with the aid. Pang et al. (1977:6) also report studies where it was found that "Students entering four-year colleges were much more likely to report receiving both Federal and non-Federal aid than were students enrolled in two-year institutions." Looking just at federal loan programs, Olson (in Coleman et al. 1979:310) found "that a larger percentage of students at independent, expensive, or four-year institutions than at public, less-expensive, or two-year institutions do, in fact, make use of the two loan programs." (See also Tierney 1978.)

Voda (1973, cited in Davis and Van Dusen 1978:124) looked at the choice not of type of institution but of full-time versus part-time attendance at a community college and found that receiving aid did make it more likely that a student would be enrolled full-time. (Of course, one needs to remember that students who prefer to attend part-time are often not eligible for aid.)

Receiving aid and type of aid could affect continuing in a given program as well as the initial attendance choice. Kohen, Nestel, and Karmas (1976) found that having scholarship aid was one positive significant factor predicting completion of freshman year for young men.

Juniors and seniors holding a scholarship were also more likely than those without a scholarship to finish a given year. Astin (1975) discovered that students with only loans, especially men, tended more than other students to drop out of college. Using savings and the GI bill also tended to increase the chances of dropping out. Students with scholarships and grants had a slightly increased chance of completing college, as was true for those with work-study (especially those from middle-income families). (Hyde 1978 reviews studies that show grants more effective than loans or work in stimulating initial enrollment.) Astin found that any type of aid had more effect on persistence than did any aid package. NCES (1977:87) also found that financial aid was a significant variable in relation to withdrawal from a four-year school: "there was a slightly greater withdrawal rate among non-financial-aid recipients after SES and aspirations were considered (37 percent versus 33 percent)." Davis and Van Dusen (1978:125) report on some additional studies. Blanchfield (1971) had results consistent with Astin's (1975) and "Kinsey (1972) reports that financial aid was very important to the success of minority poverty students at Michigan State University. Winder (1972) finds that aided students at Austin College had higher persistence rates than non-aided students." But, "Five studies find no significant relationship between financial aid or need and retention or persistence in college (Barber and Caple 1970; Harris 1976; Russ 1973; Selby 1973; Sutton 1975). The Harris study (1976) indicates that dropouts had less financial need than those who remained in school." A survey of students who left the University of Chicago also found that financial problems were not the predominate reason that students gave when they withdrew (University of Chicago 1979).

Davis and Van Dusen (1978:125-126) conclude: "The research findings do not conclusively indicate that financial aid consistently affects student access, choice, or retention. About the most that can be said is that aid helps accomplish these goals in some instances for some students. Further study is needed in which the many variables affecting access, choice, and retention are isolated and accounted for in the research design." They further report (p. 15) on research into why this might be the case: "Gross (1966) suggests that one reason the impact of aid programs is limited is because their real purpose is to enhance institutional survival, not to assist financially handicapped students. [This argument may have been less true in the 1970s, but be relevant again in the 1980s as the available student-aged population and the proportion of this population going to college decline.] Others suggest that the effects of financial aid are limited by a lack of consistent and coordinated policies and programs (Fife, 1975; Owen, 1970); by a lack of adequate program funding (Bloss et al., 1970); and by a lack of institutional support (Walkup and Hoyt, 1975)." The CSS Student Advisory Committee (1976), after a series of public hearings in seven states in 1975-76, documented many of these problems from the perspective of the student, and offered suggestions for change.

This section has looked at the ways in which the alternatives open to a student leaving high school affect the decisions the student makes about whether and where to continue his/her education. In general, these factors seem to explain less of a student's decision than family background, student ability, and schooling experience. This is even true for costs of further education and financial aid. Such results are discouraging, if one believes that policy to effectively increase

access to postsecondary education must work through such factors, which are exogenous to a student, his/her family, and school. As Hyde (1978:17-18) points out, though, little research has been done to determine the cost of working through factors that at first glance seem outside the range of policy intervention, such as test scores. At the same time, too, attention should be paid to the extent to which it is problems in the operation of policies directed at manipulating the cost of alternatives a student faces rather than the nature of the policy per se that inhibits their effectiveness. Some of these problems have just been listed. In the next section, the research on one possible problem—insufficient information dissemination--is examined.

5. Knowledge of Alternatives

The link between alternatives available to a student and what he or she decides to do is the knowledge that the student and his/her parents have of these opportunities. Much of economic theory starts from the premise that the consumer (here, of education) has perfect knowledge of the products among which he/she chooses. It is not clear that this situation exists in the case of postsecondary education choice. To the extent that it does not, we hypothesize that some students choose the option that is not the "best" one. Given the role of parents in planning for and encouraging the student in his/her plans for postsecondary education, the knowledge the parents hold is also important. We suspect that those with better knowledge are better able to realize their ambitions. At the same time, given the preselection of options that seems to go on (Jackson 1977), it is difficult to analyze the relationship between knowledge and behavior, since one could argue that people do not seek knowledge about a range of alternatives once they have decided

on a particular option. Jackson (1978) suggests that the decision to seek information parallels the decision to select a given college or type of college. Only longitudinal data would allow us to sort out the effects of better information from the process of preselection.

Research on the knowledge young people have of educational possibilities and of the world of work indicates that they have a fairly realistic view of possible attainment. Grasso and Kohen (1977, using the Parnes data) found that about three-fifths of the young men not yet finished with high school in 1966 had educational goals congruent with their occupational goals. For those with noncongruent goals, the usual situation was that of holding educational goals higher than those needed to attain occupational goals. This study did not support the idea that those in higher grades as compared with those in lower grades had a better idea of what education went with what occupation. Kerckhoff (1977), however, found that older American boys had a more realistic view of their probable educational achievement than younger boys. By their senior year, students may be well aware of the limitations on their achievement resulting from the process of decision-making and influence that came before. With respect to information about the range of occupations one might fill, Mott and Moore (1976, using the Parnes young women data) and Parnes and Kohen (1973, using the Parnes young men data) found that whites, at least, had a reasonably high knowledge of the world of work. For men, knowledge of the world of work had an independent effect on later occupational location and wages, while for women, only among blacks was the knowledge of the world of work score even marginally significant in predicting wages.

Although recent American studies on parents' and students' knowledge of postsecondary education costs and sources of funding are scarce,

there is some evidence that neither group has much information on such issues. The 1959 Roper poll (Roper 1959) found that 48 percent of parents of children less than 18 years of age and not in college had no definite idea of college costs. The other 52 percent gave a median guess ($1,450) that was reasonably close to actual costs. At the same time, 46 percent of those who did not expect their child to go on to college said it was because of money. It is not clear to what extent the lack of expectations of higher education (which might be based on perception of the child's ability, motivation, and so on) leads to a failure to search for knowledge. The Campbell and Eckerman (1964) study done a few years later also found realistic perceptions of costs among parents. However, this study does not report how many parents gave no answer. Moore (1973, cited in Davis and Van Dusen 1978:50), surveying parent participants at financial aid nights in New York, found that "only one-fourth of the parents had received financial aid information from guidance counselors and that most had made no plans for college expenses." And those results are from parents who were actively seeking knowledge.

A study that sheds more light on the interrelationships among parents' and students' knowledge, social class, and student ability is that done in 1971 in Ontario of high school students in grades 8, 10, and 12, and of parents of a random subsample of students (Porter, Porter, and Blishen 1979). This survey found that 50 percent of grade 10 students, 41 percent of grade 10 parents, 33 percent of grade 12 parents, and 26 percent of grade 12 students did not know the range of the average fees at Ontario institutions. Parents of 10th graders and grade 12 students and their parents were about equally likely to know the correct range, 35 to 40 percent. Those who gave incorrect answers were more

likely to overestimate than underestimate costs. (Other studies have shown some underestimation of other college-related costs, though. See Corwin and Kent 1978.) Those actually planning to go on to university were somewhat more knowledgeable: 62 percent of grade 12 students and 55 percent of parents of grade 12 students planning to go on knew the correct range of average fees; however, among grade 10 students planning further education after high school, only one-fourth knew. There were some differences among grade 12 students going on to university by social class. More of those to whom costs might be expected to be most important (those in the low-SES group) knew the average range, as compared with those in higher groups. "Of course, there may well be something of a vicious circle at work. At the lower end of the class structure university is seen as impossibly expensive. Students select their courses and set acheivement levels for themselves which in time preclude them from going on to university. They pay little attention to the information about costs which might be available, and so continue in ignorance. It is only the brightest and the high achievers who have broken out of the circle, have set their sights on university, and are better informed about the costs and means of financing it" (Porter et al. 1979:110-111).

Under the Ontario system of financial aid, parents are expected to contribute. Most parents were willing to do so, including almost two-thirds of those who were expecting their children to go to work. However, a large proportion did not know how much they were prepared to spend: 37 percent of those who wanted their child to go to university and around 40 percent of those who expected their child to go to a community college did not know how much they would spend. Higher proportions of parents with high-achieving children did know how much they would

spend, just the ones for whom going on in school was most probable. Even among parents who had made some plans (40 percent), 36 percent did not know how much they would spend. As Porter, Porter, and Blishen suggest, these inconsistencies might be the result either of real uncertainty about future plans and options (e.g., whether the child would be living at home or not) or of giving socially acceptable answers that break down when details are requested.

When asked about the chances of getting financial aid, among those in the five-year program (i.e., those who would take grade 13 and therefore be eligible for university) with grades of 60 or higher (55 being a C grade), approximately 40 to 60 percent of those in grade 10 and 20 to 30 percent of those in grade 12 thought their chances of getting financial aid were not good. There was some tendency for those from lower SES backgrounds to think they could get aid. This is appropriate since the criterion for aid in Ontario is need, but less than half of the grade 10 students and their parents knew this. However, two-thirds of the grade 12 students and 55 percent of their parents realized that any student who had need was eligible for financial aid, and somewhat more of the parents of the highest ability students did know the criterion used. High proportions of students in both grades did not know how much they could expect from aid (relative to total costs).

Seventy-five percent of the grade 12 students and their parents knew aid was available, but there was less knowledge among those in the lower grade, a time when decisions were being made. The most knowledgeable were from lower SES groups. With respect to written materials on opportunities for education, 85 percent of grade 10 parents and 76 percent of grade 12 parents had not read anything. However, 75 to

80 percent of the lower SES students planning to go on had read something. Still, it is not clear what happened to the students not planning to go on, whether the 30 to 40 percent of this group who had not read the materials might have made different plans with more information.

A large proportion of students and their families at both grade levels did not even understand the system of higher education and its requirements. For example, 69 percent of the grade 12 students did not know from which grade one could enter an Ontario university. About 50 percent did not know what high school programs were accepted.

In general, this survey shows some learning: those who are more immediately faced with the postsecondary education decision know more about what is available. Also; to some extent, those of high ability and from low SES—the groups most likely to use and to need such information—are more knowledgeable about costs and sources of funding. Parents and students were, on the average, probably equally well-informed, perhaps reflecting some interaction in the process of getting information, though, in the earlier grade, parents tended to have a slight edge with respect to information. The level of information in general, however, was lower than would be expected for rational decision-making with respect to the important area of education. To some extent those most likely to use an option knew most about it. It is not clear whether this information resulted in the decision (many students at least had read about educational opportunities) or resulted from it.

We have not been able to find a survey comparable to the Ontario one in the United States. The range of postsecondary schooling alternatives is narrower in Ontario than in the U.S. generally and the costs are lower and more uniform. At the same time, a smaller proportion of

Canadian students go on to university than in the U.S., so going to university is seen as a more elite activity. It is thus not clear whether the situation in the U.S. would be worse than in Ontario. There is some scattered evidence of lack of knowledge and concern about this lack on the part of U.S. students and their families in addition to the studies already cited. Various studies have found that students underestimate the total costs of college (CEEB 1976), that they give "money" as a reason for not going on, and that about 50 percent of all students technically qualified for aid do not apply. (On the other hand, Carroll 1979 reports that even students in college and receiving aid cannot accurately report costs and aid amounts.) Another concern is that those who need the information most do not get it. At least among seniors in the NLS72, there do not appear to be differences in knowledge of loan programs among students by plans, educational goals, or family SES (Olson, in Coleman et al. 1979). Approximately one-fifth to one-third of students said they did not know about any loan plan at all. However, it is difficult to disentangle not using the plan from lack of knowledge about it, since the two dimensions were combined into one question. There has also been concern that students do not know whether they will have aid at the time they have to select a school, so that they make the choice of where to apply on the basis of tuition and other costs rather than net costs. Hyde (1978:37) suggests this as the reason that the enrollment response to a change in tuition is greater than that for aid: students are sure of tuition costs but unsure of the availability of aid. Hearn (1980) speculates that earlier information on eligibility for aid might influence at least some students of lower academic preparation to enroll and, further, to influence some students to shift from two-year to four-year

schools, with perhaps an overall closer matching of students to institutions. One recent complaint is that there are long delays in notifying students of receipt of aid, especially in some states, so that the decision even of where to go may now be made without good information about net cost (although Leslie and Fife, 1974, report that 90 percent of their scholarship winners "knew they were receiving aid" or "were counting on receiving aid" before making their decision). Those who enroll without aid, even after identifying a need for it may have less of a chance to complete school (Carmody et al. 1972; CEEB 1976).

A survey by Willett (1976) illustrates the real problems students have in getting information. She wrote to seventy-seven colleges and universities in the Boston area, asking for information about costs and financial aid. A large number of schools did not reply at all. The ones that did reply did not give an accurate picture of the types of aid they could offer. The researcher found that for students to get sufficient detail on costs and aid they would have actually to apply or even be admitted to the school. CEEB (1976) reports some of the reasons given by institutions on why the information is not available. These include the fear that "the truth will scare them away," that it is too complicated to communicate, that policies are not clear even to the university itself, that they cannot handle more students. A survey of prospective students done by CSS in connection with the project to improve communication about costs and financial aid found that students asked for more information about general costs and how and when they were to be paid rather than for detailed information about various kinds of financial aid. The suggestion from the project was that general information needed to be available early so parents could begin planning and

students would realize the feasibility of college if they were to persist in school, with more detailed information later. As of 1976, Section 493A of the Education Amendments of 1976 requires that institutions receiving federal aid funds provide information about such programs. It is not clear to what extent such information is available and accurate.

The CSS Advisory Committee (1976:22), after a series of public hearings in seven states in 1975-76, concluded in part, "Choice is also predicated on another myth within the financing debate--the myth of perfect information. . . . Unfortunately, this argument assumes that all participants enjoy equal information about financing possibilities and educational alternatives; however, the goal of equal information remains a distant objective." They discuss problems arising from knowledge gaps with respect to both access and persistence. Problems with financial aid counseling can lead to later problems as well. Olson (in Coleman et al. 1979), for example, found that those who had not discussed the terms and conditions of their student loans with someone were more likely to default. In general, there is little direct information on the link between information and attendance, retention and later achievement. To get an accurate picture, we need longitudinal data, including data from those who do not go on immediately into some postsecondary education program.

6. Summary

This literature review has surveyed the research on the influences on a student's postsecondary education plans and activities of the student's characteristics, of the family's socioeconomic position and of the parents' attitudes, of school and community attributes, of the nature of school and non-school alternatives open to a student after

high school, and of knowledge about postsecondary education and financial aid. The focus had been on the family's effect and decision-making after high school, but the other factors have been examined as the conditions under which family decision-making occurs.

Students' characteristics, especially academic ability, were found to have a large impact on the student's educational plans and activities. This is not surprising, given that pursuing higher education requires a solid base from previous schooling. However, family socioeconomic background is also an important set of variables explaining educational plans and attainment. The nature of this effect, though, is not clearly understood. Parents' attitudes and values, as well as their objective social position, seem to be involved. One definite finding is that the effect of family social position is more than an effect of family income. Family income, net of other factors, tends to have relatively little influence on what a student does after high school. Outside the family, during the high school and earlier years, the schools' socioeconomic composition and "quality" seem to have little effect, although the plans of a student's peers and the track he/she is in do influence plans and attainments.

There is an intuitive belief that money is a big barrier to higher educational attainment for some students. Given the lack of effect of parental income on educational plans and activities, it was reasonable to shift attention to the nature of costs of different types of activities after high school. Taking a job, getting married or entering the military may be alternatives or complements to continuing in school after high school. Purusing these other activities may indirectly indicate that the cost of further education immediately after high school is too high. Further, engaging in these activities may

affect the net cost of education; for example, being married may make it difficult to get financial aid, or having been in the military may qualify one for special aid. Although some research has included examination of these alternatives to schooling, most work has not fully explored the implications of such activities for the cost of schooling.

Looking directly at research on the effects of educational cost and aid on educational behavior led to rather weak conclusions. Direct costs do seem to be more important for low-income than for high income students. Yet the direct cost of an institution is not generally one of the main factors in choice of a school, perhaps because much of the choice about where to go to school after high school has already been made by the time a student applies to colleges. Financial aid might be thought to attenuate the effects of costs, yet the conclusion with respect to aid's impact is that it is sometimes important to some students. In general, the impact of aid on a student's choice of whether and where to go to college is less than that of cost. The review of the research suggests the need for more comprehensive treatment of costs and alternatives as they affect students' decisions for activities after high school.

In the final section of the review, research on the effects of knowledge about educational opportunities and aid was sought. Although the Canadian study by Porter et al. suggests that this may be an important area to examine, little has been done on this topic in the U.S. What little has been done indicates that the amount of information parents and children have about postsecondary education may be too low for rational decision-making.

In the next section of this report, the results of this review are applied to developing a plan for the analysis of the parents survey data.

PART II. CONCEPTUAL DESIGN: HIGH SCHOOL AND BEYOND PARENTS SURVEY

1. Introduction

The importance of family background for a student's choice about what to do after high school is a recurrent theme in the preceding literature review. The choices students make at this stage in the lifecycle are important--educational attainment continues to affect levels of status and income received later, in the world of work. To the extent that parents influence the nature and quantity of the education their children receive, parents have indirect influence on these later attainments. Governments at the various levels are interested in the determinants of educational decisions, since governments can more easily intervene to prevent educational inequality than later occupational inequality (Hauser 1975). As the literature review makes clear, the ways in which parents' attitudes, behavior, and socioeconomic position influence a student's planning and behavior are many. The data from the parents survey of High School and Beyond will enable researchers to explore in more depth the nature of the effect of family background on a child's postsecondary education plans.

Of particular interest with respect to future policy decisions are the parents' willingness and ability to financially support their child's activities after high school. Federal aid programs expect that parents will make a "reasonable" contribution to their child's postsecondary education. Yet, it is not known to what extent parents will not or cannot make such contributions, and to what extent these contributions are affected by the level of their general aspirations and expectations

for their child, their knowledge about the costs and requirements of postsecondary education, and their planning for such activity. Nor is it entirely known to what extent such parental attitudes, knowledge, and prior action affect their child's chance to enter and complete different types of postsecondary education.

As the literature review indicates, the data have not been available to answer these questions. Previous studies have gathered detailed financial data from parents of students who have applied for aid and have gathered detailed attitudinal data (including perceptions of parents' attitudes) from high school students generally. They have not combined detailed parental financial information and attitudinal data with data from students on their abilities, plans, and perceptions. Because the parents survey of High School and Beyond will provide data that can be combined with the data from the student survey, it will open the way for analysis that will fill in many gaps in our knowledge about the process by which students and their families make decisions for the students' life after high school.

Unfortunately, the data that will be gathered, despite their richness, have a serious limitation. There will be no possibility of real longitudinal analysis. As the preceding review has repeatedly emphasized, postsecondary plans are made as a result of a long process, one that begins before the senior year in high school and continues beyond it. Data from parents will be collected only for a subsample of parents of seniors, without special attention to the parents of students who will be surveyed again in the follow-ups. We will therefore miss the chance to see what changes occur in parents' knowledge of postsecondary options as their child gets closer to the end of high school

(changes that the Porter et al. (1979) study suggests do occur) and will we miss the chance to see how students' decisions to delay university entry (decisions more students are making) interact with changes in parents' attitudes and socioeconomic situation. Indeed, as currently funded we will not be able to determine what the relationship is between parents' input and students' behavior, as contrasted with plans for after high school, since only a relatively few students in the follow-up will be those whose parents are surveyed.

The cross-sectional nature of the data has serious implications for the sorts of policy inferences that can be made from it. Assume, for example, that one is using regression analysis. The input to the regression program is a correlation matrix. Correlations give no hint in themselves of the direction of causality. The researcher therefore hypothesizes the causal ordering. Say he/she assumes X causes Y. Finding an effect of X on Y might suggest manipulating X to bring about a change in Y. Parental knowledge of financial aid options might be found to affect a student's plans for college. The obvious policy implication is that increasing parents' knowledge of available financial aid would increase college attendance. Yet, it is possible that the relationship is spurious, that both variables are the result of much earlier decisions, and that manipulating one does not affect the other. The analysis with cross-sectional data thus could not give strong evidence that providing financial aid information earlier would affect the enrollment decision. Obviously the extent to which this is a problem will depend, in part at least, on the researcher's imagination. Further, even data on all the high school years would not necessarily go far enough back to find the real sources of postsecondary plans. However, having data over even

a few years enables one to get some idea of the ways in which sets of variables change, and of which variables seem to change before others.

There are, of course, forms of statistical analysis that enable one to specify for cross-sectional data models with reciprocal causation, which when estimated suggest the relative strength of the causal paths in the two directions. Unfortunately, nonrecursive models seem to be very sensitive to the way in which the estimation procedure is set up (e.g., to the choice of instrumental variables). Despite this, nonrecursive models should be used to explore the relationships between parents' and students' plans, attitudes, and actions.

In the following sections of this design report, various stages in the analysis are suggested, in very rough order. Behind these suggestions is a conceptual model such as Figure 1. This model, while showing a causal ordering, is a preliminary one. It remains to be tested. For the moment, it provides a way of organizing the concepts involved in an analysis of postsecondary education decision-making. The ultimate dependent variable is the student's choice of what to do after high school. This decision will involve more than simply the parents' influence, but the focus here is on the parents' contribution to the decision. One way in which the analysis could proceed, however, is by predicting various outcomes with parental data alone and then with both parents' and students' data to get a sense of the magnitude of the contribution of parents and family background to educational outcomes. The suggestions that follow focus on four aspects of the family-student interaction: parents' aspirations and expectations for their child; parents' knowledge about postsecondary education; parents' planning for and willingness to contribute to their child's education after high school; and parents' ability to make the contributions they are expected to make—their "need."

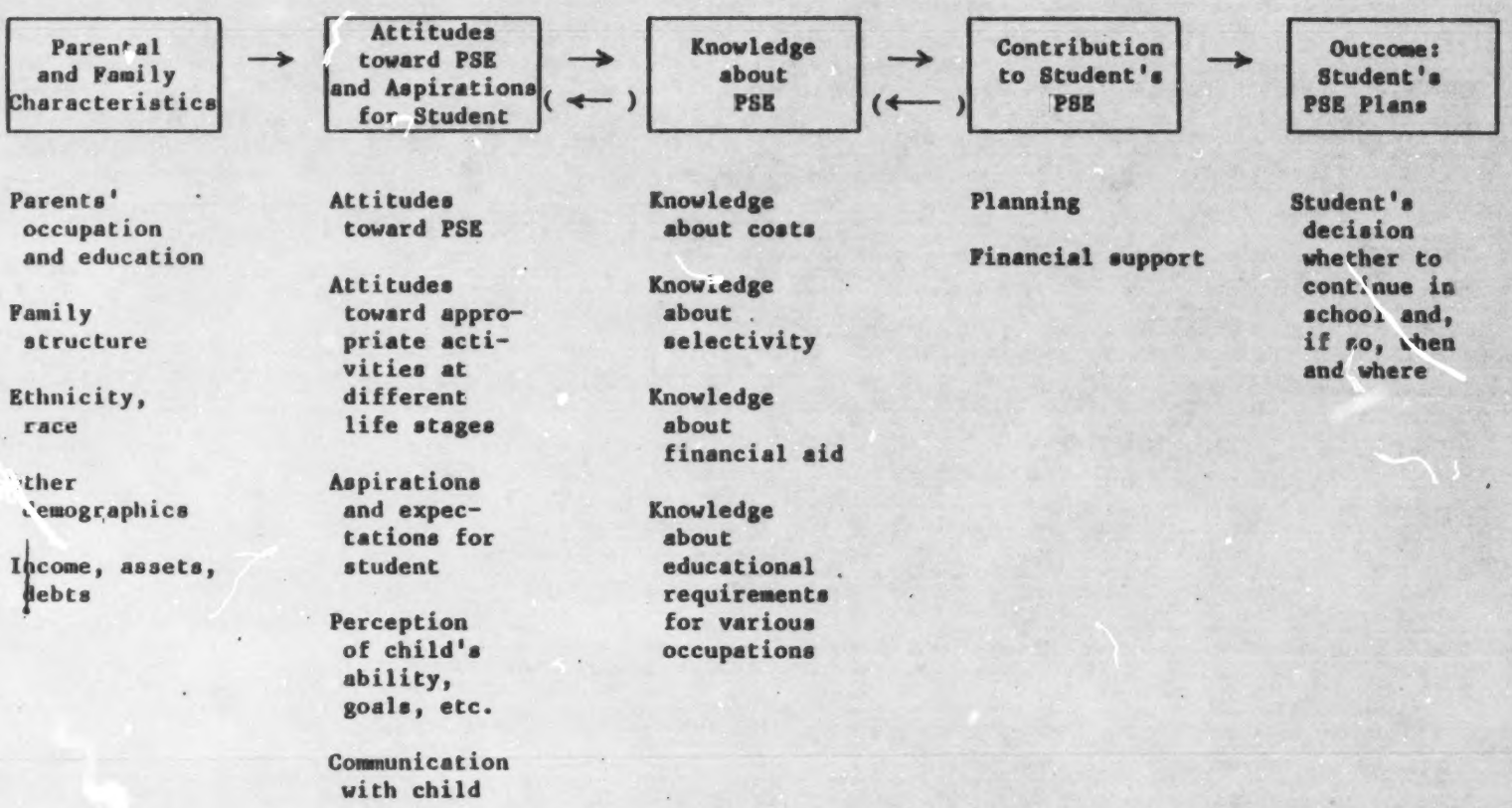
Parental and Family Characteristics
Attitudes toward PSE and Aspirations for Student
Knowledge about PSE
Contribution to Student's PSE
Outcome: Student's PSE Plans
Parents' occupation and education
Family structure
Ethnicity, race
Other demographics
Income, assets, debts
Attitudes toward PSE
Attitudes toward appropriate activities at different life stages
Aspirations and expectations for student
Perception of child's ability, goals, etc.
Communication with child
Knowledge about costs
Knowledge about selectivity
Knowledge about financial aid
Knowledge about educational requirements for various occupations
Planning
Financial support
Student's decision whether to continue in school and, if so, when and where

Fig. 1. Conceptual model of post-secondary education decision-making.

2. Parents' Aspirations and Expectations

The literature review showed consistently that parents' aspirations and expectations for their children affect the child's plans and actual attainments. Generally, the data have come from students' reports of their perception of their parents' hopes for them. Kerckhoff's (1971) results show a less than perfect association between such perceptions and the parents' attitudes. The parents survey will make available parents' reports that can be compared with the students' reports. One piece of analysis to be done will certainly be replication of earlier studies of effects of parents' aspirations on their child's plans, using the parents' reports.

The determinants of parents' expectations and aspirations have not been fully explained, although Sewell and his associates in a number of papers have included students' perceptions of their parents' aspirations and expectations for them as intervening between family socioeconomic status and child's ability and later outcomes. Given the arguments about the differences in values by socioeconomic class, it will be important to see to what extent values concerning higher education and lifecycle activities vary by parents' education, occupation, and ethnicity (and sex of the child), and whether such values in turn affect the parents' aspirations and expectations for their child. (And here too, we will be able to use the parents' presumably more accurate reports of their socioeconomic position rather than the students'. See Bielby et al. 1977 and Mare and Mason 1978 on the reliability of children's reports of their parents' SES.) Further, to the extent that values related to higher education rather than perception of the child's ability seem to influence the parents' expectations and aspirations one can talk

about barriers within the family to the child's continuing education. One research finding is that most parents want their child to go on in school. It will be important to identify any subgroup for which this is not the case.

The difference between expectations and aspirations and between occupational and educational aspirations and expectations might give clues as to (1) whether parents are aware of the levels of education required to get certain kinds of jobs and (2) whether parents have hopes higher or lower than they think are reasonable for their children. (Barriers to fulfilling aspirations can be explored with data on the child's ability and on available knowledge and resources).

Comparison of the students' reports of their own aspirations and expectations and of their perception of their parents' with the parents' reports will provide evidence on (1) the validity of the students' reports, (2) the strength of communication between parents and child, and (3) the congruence between what the child wants to do and what his/her parents want him/her to do. Direct questions are asked about the last two points, as well.

By looking at parents' aspirations and expectations, then, one can:

- Replicate previous work on the effects of parental aspirations and expectations, using parents' reports
- Discover attitudinal barriers to high aspirations
- Identify subgroups that do not have high educational and occupational aspirations for their children
- Find out to what extent parents know about the work world and its requirements
- Discover which parents see the greatest gap between what they would like for their children and what they expect and why
- Find whether parents communicate their goals for their child to their child

Analysis of aspirations and expectations should inform policy on information dissemination and on counseling focus.

The variables are operationalized as follows:

1. The ultimate dependent variable here is child's plans. Indicators of this are available, probably most reliably from the student survey. See ch. 5 in Coleman et al. (1979) for reference to the specific question numbers. On the parent questionnaire (using the pretest, self-administered version--see Appendix A), parents reported their child's plans for the fall after high school in Q. 13. Questions 38, 39, 41, and 42 ask for more details about schooling plans.

2. Parents aspirations and expectations, which are the dependent variables for most of analyses in this section, are operationalized as follows: Q. 4 gives educational aspirations, Q. 6 educational expectations, and Qs. 7 and 8 give occupational expectations in open-ended and precoded form (no occupational aspirations are given). Pretest results from both parents and students on these questions may enable a choice of one or the other of the two question forms. Ideally, Q. 7 would be retained since it potentially provides more detail. Question 9 gives a retrospective history of college expectations for the child.

3. Determinants of aspirations and expectations can be measured as follows:

   a) Socioeconomic position of family: Q. 43, respondent's education; Qs. 52-54, respondent's current job; Qs. 55-56, respondent's job five years ago; Q. 60, spouse's education; Qs. 61-63, spouse's current job; Qs. 64-65, spouse's job five years ago; Q. 70, age of respondent; Q. 72, number of dependents; Q. 73, number of child's siblings; Q. 75, ethnicity; Qs. 76-77, language use; Q. 78, household possessions; Qs. 79-83, information on housing debts and assets; Qs. 85-88, income, assets, and debts.

   b) Perception of child's ability: Q. 2, child's high school program; Q. 3, child's grades; Q. 5, child's aspirations; Q. 10, child's ability to complete college; Q. 11, whether the child is a hard worker; Q. 36, whether the child would be accepted at different types of schools.

   c) Values with respect to higher education and other activities: Q. 17, feelings about the child's plans; Q. 18, ideal age for marriage, etc.; Q. 19, reasons for going on in school; Q. 40, factors in choosing a school; Q. 44, whether parent feels he/she has had enough education; Q. 46, attitudes toward women and work.

   d) Plans of students may affect parental aspirations. This causal connection should be explained as well as that in the reverse direction.

4. Communication channels and influence.

a) Indirectly, this would be measured from comparison of student's and parent's perception of the other's feelings, including Q. 5 (how far in school do you think your child would like to get) and Qs. 4, 5, 7, and 8.

b) Direct measures (from parents' points of view) include: Q. 15, have you influenced your child's plans; Q. 16, how much have you talked with your child about plans for after high school; Q. 67, how much the spouse has influenced the child's plans.

3. Parents' Knowledge of Postsecondary Education

As the literature review states, knowledge is the link between options available and the individual's decision-making. With respect to postsecondary education, to make a rational choice among alternatives one should know at least three things: the range of schooling options available; the direct costs of different types of schooling (including living expenses); and the availability of aid, which will affect the net cost of attendance. Ideally, a student will attend an institution that best suits his/her career aspirations and ability. Choice among suitable institutions should be based on reliable information about the net cost (i.e., total cost minus any financial aid). To receive financial aid, a student (and/or his/her family) has to know of the program's existence, criteria for eligibility, and application procedures. Further, families who are aware of the extent of their expected contribution to the student's education may be ones who have planned for and encouraged their student's plans for further education. Those who expect too little from financial aid may discourage their child from planning for further schooling, while those who expect too much may fail to plan ahead to make the financial contribution that will be expected of them. Parents' general knowledge of postsecondary education options may affect their

encouragement of and expectations for their child's education. Or their aspirations for their child may have led them to search for information. A third possibility is that those from higher socioeconomic backgrounds know more about postsecondary education to begin with, because of their own alumni status (representing both their own participation and receipt of continuing information) and because of the sorts of informal networks in which they are located. In this last case, greater knowledge of postsecondary education may explain some of the difference in college attendance by socioeconomic group, but as a result of general culture associated with being from a certain strata rather than a result of any search for knowledge.

One justification for federal aid programs is to ensure that students are able to choose to attend some form of postsecondary education and to attend the type of program from which they will best benefit, regardless of family income. Yet, as the literature review made clear, there is very little information available on whether parents know about aid programs or the range of institutions (with their differing costs and programs). The most extensive data available on this topic are from Canada, which has a different financial aid and postsecondary education structure. The parents survey can help fill in this gap for the United States. We will have data on parents of students planning to go directly on to college, planning to go to college at some time (as indicated by their educational expectations) but not immediately after high school, planning to take some other type of training, and not planning to continue their schooling after high school. We can thus examine in cross-section the extent to which preselection of post-high-school options is accompanied by a limited search for information: Do those who do

not plan on further education have less knowledge about various aspects of postsecondary education than those planning to continue? Do those planning to continue have the information appropriate to their choice at the end of high school? Unfortunately, unlike the Porter et al. (1979) study, the parents survey will not enable us to disentangle the direction of causality, beyond what can be done with nonrecursive models. We will not be able to tell, for example, whether parents' knowledge of post-secondary education increases over time (as we could even with data from parents with children in different grades), nor will we be able to tell whether a lack of knowledge on the part of parents inhibits their own and their child's aspirations or is the result of them.

The sorts of issues that can be explored with the parents survey data are:

- The extent of knowledge that parents have about the selectivity of postsecondary institutions, about costs, and about financial aid programs (and this can be compared with student data to see how evenly knowledge is distributed throughout a family)
- The relationship between knowledge about postsecondary education and family socioeconomic background
- The relationship between a student's post-high school plans (including application for financial aid) and knowledge about postsecondary education
- The relationship between parents' aspirations and expectations for the child and their knowledge about postsecondary education
- The relationship between the parents' understanding of financial aid and costs and their planning for their child's education
- To some extent, the sources of information about postsecondary education
- The effects of different sorts of state efforts to disseminate information which might be analyzed with the addition of state level data to the data set. The student and school data might suggest how parents with children in different types of special programs vary in their knowledge about post secondary education (e.g., do parents of children in special federal programs know more or less?).

The variables are operationalized as follows:

1. The central variable in this stage of the analysis is knowledge of postsecondary education. Q. 23 asks generally about knowledge of costs, although it requires that parents know of a specific institution of each type (which may result in missing information for parents who know the general range of costs for, say, a community college, but who do not know the name or location of a specific institution). Q. 27 and 28 ask for an estimate of the child's living and schooling expenses. These can be compared with estimates of the costs of different sorts of situations. Q. 31-33 ask about knowledge of specific state and federal programs. (There may be problems here with parents knowing about a program in terms of the source of aid, for example, through a bank or through an institution, rather than in terms of the name of the program.) Q. 10, about the child's ability to complete college, and Q. 36, about the possibility of the child being accepted at different sorts of institutions, combined with data on the child's grades and test scores, can provide a sense of the extent to which parents understand the chances that their child actually could get into some postsecondary education program. Q. 41 and 42 will enable us to control for actual acceptance. Q. 35, eliciting a response to various statements about financial aid, also shows the sort of understanding parents have about financial aid.

2. Socioeconomic status, student's plans, and parents' aspirations have already been discussed. Q. 34, about whether the student has applied for financial aid, can be used to see the extent to which those who do plan to use aid have more knowledge of it.

3. Planning for postsecondary education will be discussed in the next section.

4. Sources of information. Q. 35 has as one statement, "We have not been able to get much information on how and where to apply for financial aid," that might indicate that parents are searching for information without much luck. Q. 30 asks directly whether parents have tried to get information on financial aid, and, if so, where.

4. Planning for and Willingness to Contribute to a Child's Education

The literature reviewed showed that parents, even those expecting to contribute to their child's education, do not plan for such expenses. Why is not clear. Lack of adequate knowledge about the costs of schooling and what financial aid can contribute could be a factor. The previous section suggests that this relationship be analyzed. General lack of

financial planning, particularly in an era of generally increasing inflation, could be another reason. The General Mills study demonstrated that only about a quarter of American families save money for the future without dipping into these funds for current expenditures. One might expect such general financial sttitudes to vary by a family's socioeconomic position and income. As Lane (1972) hypothesized, those with an experience of an unpredictable future might also be less likely to plan for the future. Attitudes specifically about who is responsible for postsecondary education could be yet another factor affecting parents' planning for and willingness to contribute toward their child's education. Again, the General Mills survey showed a large proportion of American families felt the government owed them an increasing standard of living. This attitude might extend to expecting the government to pay for their child's education. Parents who feel that more should be done for students in the person of their child may be reluctant to take responsibility for providing the necessary funds for postsecondary education. Of course, some parents might not be able to contribute to their child's education. Others, however, might be willing and able to sacrifice for it, for example, in terms of a wife going to work, a husband taking on extra jobs, or parents refinancing their home. (Remember that one argument over the reasonableness of needs assessment had to do with the extent to which parents saw their homes as a liquid asset.) Some parents might also be willing to go into debt to help provide their child with an education.

Once again, the direction of causality is not clear. Parents' lack of planning and motivation to make a financial contribution to their child's education may result in a child not planning to continue his/her

education or planning to go into a two-year or vocational program rather than a four-year program. Or parents may adjust their planning to their perception of their child's plans. We do have a retrospective measure of whether parents expected their child to continue schooling at different grades. Further, we have some information on the parents' own experience in financing additional education after high school. Parents who themselves were helped by relatives might be more willing than others to help their child, essentially holding the belief that each generation helps the next. A parents' age may also indicate the sorts of experiences he/she has had. Those who were of college age during the Depression, for example, might have had a hard time themselves financing postsecondary education (perhaps to the extent that they did without it). They might be more (or less) willing to help their child than those who did not have to face the bleak situation of the 1930s when they were ready for college.

With the parents survey data, one can explore the following:

- The extent of family planning relative to expected costs
- The association between general attitudes toward saving, borrowing, and budgeting and planning for a child's education, controlling for the child's plans
- The ways in which planning attitudes generally and planning for college vary by socioeconomic background and economic history
- Attitudes toward who is responsible for funding postsecondary education, and whether they seem to relate to planning for a spcific child's education
- The extent to which parents seem willing to sacrifice in order to contribute to their child's further education
- The effects of the parents' own life experiences on their attitudes toward financing of postsecondary education and actual contribution to it

Knowing which parents feel responsible for their child's further education and how they plan to fulfill this responsibility may help in planning

and explaining programs that involve parents' contributions toward their child's achievements. It is also to the political advantage of those administering programs to develop a sense in those affected by any program that it is administered fairly and meets the needs of its clientele.

The variables are operationalized as follows:

1. Here the central variable is extent of family planning to meet the expenses of postsecondary education. This will be used as part of the explanation of the student's plans and will be explained in terms of the parents' socioeconomic status, attitudes, experiences, and perceptions of student's plans. Q. 24 asks about specific actions parents might have taken in anticipation of their child's postsecondary education expenses (e.g., starting a savings account). Q. 25 asks when parents began to set aside money for their child's education after high school. Q. 26 seeks information about how much has actually been set aside. Q. 29 is on the ways in which parents expect expenses to be met.

2. Attitudes toward saving, borrowing, and budgeting. Question 47 asks under what circumstances the parent feels it is alright to borrow money (with "to finance children's educational expenses" one option). Q. 48 measures general attitude toward saving. Q. 49 has the respondent indicate whether he/she usually plans spending, and, if so, how.

3. Attitudes toward financing post-secondary education. Q. 20 asks directly, "Who should have the main responsibility for the cost of education beyond high school?" Q. 21 is about who should receive financial aid, and Q. 22 is about how federal aid should be provided.

4. Ability to contribute to child's education. More will be said about this in the next section. Parents' perception of their ability to help finance their child's education could be affected by the extent to which they overspent their income (Q. 50), which might be an indication of some extraordinary problem (Q. 51). Current employment status and current employment of spouse (Qs. 52 and 61) could also indicate special financial problems if one or the other is unemployed. Comparison of the respondent's current occupation with that five years ago (Q. 54 versus Q. 56) and of the spouse's current with past occupation (Q. 63 versus Q. 65) might indicate whether the family has been experiencing upward or downward mobility, or the addition of income from a second adult working for pay. Q. 57 and 68, asking for employment history in terms of the child's schooling, also measure, to some extent, the stability of the parents' employment. Qs. 79-83 and 85-88 give current income, assets, and debts.

5. Willingness to sacrifice. As already mentioned, Q. 47 asks whether the parents would take out a loan to finance their child's education. Q.84 asks whether and under what circumstances the

parents would refinance their home or take out a second mortgage to help with their child's education. Q. 58 (for the respondent) and Q. 66 (for the spouse), asking for work plans five years from now, might tell us whether a woman has gone to work outside the home or a man delayed retirement to provide extra income to help support a child. Unfortunately, there is not a direct question about whether the parents could or would reduce other expenditures to contribute to their child's further schooling.

5. Ability to Contribute and Expected Contribution

For aid based on need, the procedures used to assess need can critically affect the ability of some students to continue their education after high school. This was discussed in the literature review. One of the major reasons for the parents survey was the collection of income, assets, and debts information from parents of students who had not applied for aid, of those who were not planning to continue schooling as well as from parents of those who had applied. With data from the parents survey, it will be possible to estimate the contribution that might be expected from the parents of those who are not planning to use financial aid. It will be possible, in this way, to see whether there are large numbers of students eligible for aid who are not planning to use it, perhaps to the detriment of their further education. We will be able to compare eligibility for aid with students' and parents' responses about why they have not applied for aid and why the student is not going on in school to see whether lack of knowledge about aid is a barrier. For parents whose student is applying for aid, we can compare the parents' estimate of the amount they will spend on their child's education with that expected from them under different schemes for estimating need.

There have been complaints about the failure of needs analysis to take into consideration the actual financial situation of the family. We will be able to examine the family's employment history and perception

of their financial situation in the previous year to try to explain discrepancies between expected and actual contributions. Nelson et al. (1978) explored the determinants of under-contribution for parents whose students applied for student aid. We can now look at over- and under-contribution for a sample of those whose children are planning on continuing in school but not necessarily with aid.

The supporting statement for the pretest instrument suggests using the data to simulate the effects of policy change:

> It is frequently necessary to be able to simulate changes in the procedures for computing expected contribution for planning purposes. Examples of policy issues that will have to be analyzed are: How will aggregate need for student aid change--
>
> a. if home equity is excluded from the computation,
>
> b. if all assets are excluded from the computation,
>
> c. if the family maintenance allowance is increased, from the Bureau of Labor Statistics low to moderate standard,
>
> d. if family income is deflated by the rate of infaltion. (NCES, OED, NORC, 1979:7-8)

With respect to the need for financial assistance, we can answer questions such as:

- What is the distribution over all families of high school seniors of eligibility for aid and of expected parental contribution? Do there seem to be groups that under-use the financial aid programs, and, if so, do the students from these groups seem less likely to plan on continuing in school?

- How large is the gap between what parents expect to contribute to their child's education and what they are expected by the aid programs to contribute? What are the determinants of this gap?

- What would be the results of various simulated changes on policy with respect to financial aid?

The variables are operationalized as follows:

1. Factors that go into <u>calculation of need</u> would include: parents' assets, debts, and income (Qs. 79-83, 85-88); number of dependents and of other children in school (Qs. 72-74); marital status and age (Qs. 59, 70); student's income (Qs. 12, 29). (See the aid forms in Appendix B. Medical and dental expenses not covered

by insurance, casualty and theft loss, unreimbursed elementary and high school tuition are items mentioned in the aid forms but not specifically in the questionnaire. Also, we need to add again the question on number of people in the household.)

2. Parents' anticipated contribution. Q. 29A (along with Q. 26).

3. Reasons for not using financial aid or not continuing in school. Qs. 35 and 37.

4. Other aspects of the parents' financial situation. See previous section.

These suggestions for analysis do not exhaust the possible uses of the parent data. In combination with the student, school, and other data, the survey permits replication and extension of many of the sorts of studies reviewed in the literature search. The analyses listed here are perhaps the most unique and pressing to be performed with the parent data set. They are the ones that should make the most contribution to decisions about information dissemination and financial aid planning.

APPENDIX A

Questionnaire

PQ/FT 4278
August 1979

Form Approved
FEDAC NO. S 40
App. Exp. August, 1980

BEGIN DECK 71

01-05/

06/R

07/1

Thank you for participating in HIGH SCHOOL AND BEYOND. Your participation will help us learn more about the experiences of high school students and their plans for the future.

All information which would permit identification of the individual will be held in strict confidence, will be used only by persons engaged in and for the purposes of this survey, and will not be disclosed or released to others for any purposes except as required by law.

PARENT QUESTIONNAIRE

Parent's Name _____

Child's Name _____

Prepared for
THE NATIONAL CENTER FOR EDUCATION STATISTICS
by
THE NATIONAL OPINION RESEARCH CENTER

NCES FORM 2408-25

This questionnaire is authorized by law 20 USC 1221e-1.

The Federal Privacy Act of 1974 requires that each respondent be informed of the following:

1) Solicitation of information about the respondent as detailed in the questionnaire is authorized by Section 415 of the General Education Provisions Act as amended (20 USC 1226b).

2) Disclosure of this information by the respondent is subject to no penalty for not providing all or any part of the requested information.

3) The purpose for which this information is to be used is to provide statistics on a subsample of parents of a national sample of students as they move out of the American high school system into the critical years of early adulthood and relate these statistics to postsecondary educational costs and financial aid and other factors on the educational, work, and career choices of young adults.

4) The routine uses of these data will be statistical in nature as detailed in 9 in Appendix B of the Departmental Regulations (45 CRF 56) published in the FEDERAL REGISTER, Vol. 40, No. 196, October 8, 1975.

GENERAL INSTRUCTIONS

PLEASE READ EACH QUESTION CAREFULLY.

It is important that you follow the directions for responding to each kind of question. Here are some examples.

(CIRCLE ONE)

What is the color of your eyes? (CIRCLE ONE)

Brown	1
Blue	2
Green	(3)
Another color	4

If the color of your eyes is green, you would circle the number to the right of green.

(CIRCLE ALL THAT APPLY)

Last week, did you do any of the following? (CIRCLE ALL THAT APPLY)

See a play	1
Go to a movie	(2)
Attend a sporting event	(3)

If you went to a movie and attended a sporting event last week, you would circle the two numbers as shown.

(CIRCLE ONE NUMBER ON EACH LINE)

Do you plan to do any of the following next week? (CIRCLE ONE NUMBER ON EACH LINE)

	Yes	Not Sure	No
a. Visit a relative ...	1	2	(3)
b. Go to a museum	1	(2)	3
c. Have dinner at a friend's house ...	(1)	2	3

If you plan to have dinner at a friend's house, do not plan to visit a relative, and are not sure about going to a museum next week, you would circle one number on each line as shown.

Sometimes you are asked to fill in an answer—in these cases, simply write it in on the line provided.

Some questions have instructions following the different responses, telling you which question to answer next. Please follow the instruction next to the answer you mark. If there is no instruction, just go on to the next question.

This first series of questions is about your child's education up to this time and how you feel about it. When answering the questions, please think about the child whose name is written on the cover of this booklet.

1. First of all, how satisfied are you with the education your child has received up to now?

Very satisfied	1	08/
Somewhat satisfied	2	
Not satisfied at all	3	

---

2. Which of the following best describes the high school program your child was in this last year? CIRCLE ONE.

General program	01	09-10/
Academic or college preparatory program	02	
Vocational or technical program:		
Agricultural occupations	03	
Business or office occupations	04	
Distributive education	05	
Health occupations	06	
Home economics occupations	07	
Trade or industrial occupations	08	
Industrial arts	09	
Don't know	98	

---

3. Which of the following best describes the grades your child has received so far in high school?

Mostly A's (a numerical average of 90-100)	01	11-12/
About half A's and half B's (85-89) ..	02	
Mostly B's (80-84)	03	
About half B's and half C's (75-79) ...	04	
Mostly C's (70-74)	05	
About half C's and half D's (65-69) ..	06	
Mostly D's (60-64)	07	
Mostly below D (below 60)	08	
Don't know	98	

The following questions are about your child's plans for the future.

4. How far in school would you <u>like</u> your child to get? CIRCLE ONE.

Less than high school graduation		01	13-14/
High school graduation only		02	
Vocational, trade, or business school after high school	Less than one year	03	
	Between one and two years	04	
	Two years or more	05	
College program...	Some college	06	
	Finish a two-year program	07	
	Finish a four- or five-year program	08	
	Master's degree or equivalent	09	
	Ph.D., M.D., or equivalent	10	

5. You have indicated how far in school you would like your child to get. Now, indicate how far in school you think <u>your child</u> would <u>like</u> to get. CIRCLE ONE.

Less than high school graduation		01	15-16/
High school graduation only		02	
Vocational, trade, or business school after high school	Less than one year	03	
	Between one and two years	04	
	Two years or more	05	
College program...	Some college	06	
	Finish a two-year program	07	
	Finish a four- or five-year program	08	
	Master's degree or equivalent	09	
	Ph.D., M.D., or equivalent	10	

6. As things stand now, how much education do you <u>expect</u> your child will get? CIRCLE ONE.

Less than high school graduation		01	17-18/
High school graduation only		02	
Vocational, trade, or business school after high school	Less than one year	03	
	Between one and two years	04	
	Two years or more	05	
College program...	Some college	06	
	Finish a two-year program	07	
	Finish a four- or five-year program	08	
	Master's degree or equivalent	09	
	Ph.D., M.D., or equivalent	10	

7. Write in here the name of the job or occupation that you expect your child to have when he/she is 30 years old. Even if you are not at all sure, write in your best guess.

19-21/

_____ 22-23/

A. Do you expect him/her to be self-employed, or will he/she probably be working for someone else? CIRCLE ONE.

Self-employed 1 24/

Working for someone else 2

---

8. What kind of work will your child be doing when he/she is 30 years old? CIRCLE THE NUMBER FOR THE ONE THAT COMES CLOSEST TO THE KIND OF WORK YOU EXPECT HIM/HER TO BE DOING.

CLERICAL OR SALES, such as secretary, sales clerk, insurance agent, mail carrier, real estate broker 01 25-26/

CRAFTSWORKER, such as baker, auto mechanic, plumber, telephone installer 02

FARMER, OR FARM MANAGER 03

TECHNICAL, such as draftsman, medical technician, computer programmer 04

HOMEMAKER OR HOUSEWIFE 05

LABORER, OPERATIVE, OR SERVICE, such as construction worker, machine operator, truck driver, barber, practical nurse, janitor 06

MILITARY OR PROTECTIVE SERVICE, such as career officer or enlisted person, police officer, guard 07

PROPRIETOR OR OWNER, such as contractor, restaurant owner, small business owner 08

MANAGER OR ADMINISTRATOR, such as sales or office manager, school administrator, buyer, government official. 09

PROFESSIONAL, such as dentist, physician, lawyer, scientist, college teacher, minister, priest, rabbi 10

OTHER PROFESSIONAL, such as school teacher, accountant, artist, registered nurse, engineer, librarian, politician. 11

NOT WORKING 12

9. As far as you remember, did you expect that your child would be going on to a college or university . . . CIRCLE ONE NUMBER ON EACH LINE.

	Yes	No	
A. when he/she was in elementary school	1	2	27/
B. when he/she was in middle (junior high) school	1	2	28/
C. when he/she was in the tenth grade	1	2	29/
D. when he/she was in the eleventh grade	1	2	30/

10. Whatever your child's plans, do you think that he/she has the ability to complete a four-year college or university program? CIRCLE ONE.

Yes, definitely	1	31/
Yes, probably	2	
No, probably not	3	
No, definitely not	4	
Not sure	8	

11. All in all, would you describe your child as . . . CIRCLE ONE.

a very hard worker	1	32/
a hard worker	2	
somewhat of a hard worker	3	
not a hard worker	4	
not a very hard worker at all	5	

12. What is your child doing this summer? CIRCLE ALL THAT APPLY.

Looking for work	1	33/
Working, part-time	2	34/
Working, full-time	3	35/
Taking vocational or technical courses at a trade or business school	4	36/
Taking academic courses at a community or four year college	5	37/
Traveling, taking a break	6	38/
Other (DESCRIBE) _____	7	39/

13. Below is a list of things that your child may be doing this fall. For each type of activity, indicate if you think your child will be doing it full-time, part-time, or not at all this fall. CIRCLE ONE NUMBER ON EACH LINE.

	Full-time	Part-time	Not at all	Don't know	
A. Working	1	2	3	4	40/
B. Entering an apprenticeship or on-the-job training program	1	2	3	4	41/
C. Going into regular military service (or service academy)	1	2	3	4	42/
E. Taking a vocational or technical course at a trade or business school	1	2	3	4	43/
F. Taking academic courses at a junior or community college	1	2	3	4	44/
G. Taking technical or vocational subjects at a junior or community college	1	2	3	4	45/
H. Attending a four-year college or university	1	2	3	4	46/
I. Other (travel, take a break)	1	2	3	4	47/

14. How certain is your child about what he/she wants to do after finishing high school?

Very certain	1	48/
Fairly certain	2	
Fairly uncertain	3	
Very uncertain	4	

15. How much have you influenced your child's plans for after high school? CIRCLE ONE.

Not at all	1	49/
Somewhat	2	
A great deal	3	
Don't know	8	

16. For each time period mentioned below, how much did you talk to your child about his/her plans for after high school? CIRCLE ONE NUMBER ON EACH LINE.

	Not at all	Some-what	A great deal	
A. In elementary school	1	2	3	50/
B. In middle (junior high) school	1	2	3	51/
C. In the tenth grade	1	2	3	52/
D. In the eleventh grade	1	2	3	53/
E. In the twelfth grade	1	2	3	54/

17. How do you feel about your child's plans for after high school? Do you ... CIRCLE ONE.

approve of them?	1	55/
disapprove of them?	2	
have mixed feelings about them?	3	
have no particular feelings about them?.	4	

18. At what age do you expect your child to . . . CIRCLE ONE NUMBER ON EACH LINE.

	Don't expect to do this	Has already done this	Under 18	Age in Years: 18	19	20	21	22	23	24	25	26	27	28	29	30 or more	
A. Get married?	01	02	03	18	19	20	21	22	23	24	25	26	27	28	29	30	56-57/
B. Have his/her first child?	01	02	03	18	19	20	21	22	23	24	25	26	27	28	29	30	58-59/
C. Start his/her first regular (not temporary) job?	01	02	03	18	19	20	21	22	23	24	25	26	27	28	29	30	60-61/
D. Live in his/her own home or apartment?	01	02	03	18	19	20	21	22	23	24	25	26	27	28	29	30	62-63/
E. Finish his/her full-time education?	01	02	03	18	19	20	21	22	23	24	25	26	27	28	29	30	64-65/

19. Below is a list of reasons for going to college. How important do you think each is? CIRCLE ONE NUMBER ON EACH LINE.

	Very important	Somewhat important	Not very important	Not important	
A. Training for a good job	1	2	3	4	66/
B. Learn how to make one's own decisions	1	2	3	4	67/
C. Chance to meet someone who will make a good husband/wife	1	2	3	4	68/
D. Learn how to be sociable and get along with people	1	2	3	4	69/
E. Increase understanding of the world and oneself	1	2	3	4	70/
F. Develop interest in good books, music, and art	1	2	3	4	71/

The next series of questions is about the cost of education beyond high school.

20. Who should have the main responsibility for the cost of education beyond high school? CIRCLE ONE. 72/

Students 1
Parents 2
State or local governments 3
The federal government 4

BEGIN DECK 72

21. There has been much discussion of who should receive financial aid for education after high school. Please indicate to what extent you agree or disagree with each of the following. CIRCLE ONE NUMBER ON EACH LINE.

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly	
A. All high school graduates who want it should receive financial aid for at least two years' education after high school.	1	2	3	4	07/
B. Intelligent students should receive financial aid for schooling even if their parents can afford to pay for it.	1	2	3	4	08/
C. Financial aid should only be given to students whose parents cannot afford to pay for schooling.	1	2	3	4	09/
D. A special effort should be made to see that members of minority groups receive financial aid for education after high school.	1	2	3	4	10/
E. Financial aid for schooling is best given to students through Work-Study Programs.	1	2	3	4	11/

22. Please indicate to what extent you agree or disagree with each statement about the federal government's part in financing education beyond high school.

The federal government should . . . CIRCLE ONE NUMBER FOR EACH LINE.

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly	
A. have a national student loan program covering all schooling costs,	1	2	3	4	12/
B. provide funds to schools only, not to individual students.	1	2	3	4	13/
C. give financial aid to the states and the states should decide how to give it to parents and students	1	2	3	4	14/
D. allow parents to deduct tuition expenses from their federal income tax.	1	2	3	4	15/
E. provide financial aid to colleges to help create jobs for students.	1	2	3	4	16/

23. For each type of school listed below, write the name and location of a school you know about. Now, for each school, what is the lowest amount you think it would cost to attend that school full time for one year? Think about tuition, fees, books, and living expenses. If you have any idea at all, give your best guess. CIRCLE ONE NUMBER ON EACH LINE.

Schooling expenses would be . . .

ENTER NAME AND LOCATION OF ...	Less than $1,000	$1,001-$2,000	$2,001-$3,000	$3,001-$5,000	$5,001-$7,000	$7,001-$9,000	More than $9,000	Don't know	
A. a public junior or community college	1	2	3	4	5	6	7	8	17/
_____									18-20/
_____									
B. a state four-year college or university	1	2	3	4	5	6	7	8	21/
_____									22-24/
_____									
C. a private four-year college or university	1	2	3	4	5	6	7	8	25/
_____									26-28/
_____									
D. a private vocational or trade school	1	2	3	4	5	6	7	8	29/
_____									30-32/
_____									
E. a public vocational or trade school	1	2	3	4	5	6	7	8	33/
_____									34-36/
_____									

24. Have you done any of the following in order to have some money for your child's education after high school? CIRCLE ONE NUMBER ON EACH LINE.

		Yes	No	
A.	Started a savings account	1	2	37/
B.	Bought an insurance policy	1	2	38/
C.	Bought U.S. Savings Bonds	1	2	39/
D.	Made investments in stocks or real estate	1	2	40/
E.	Set up a trust fund	1	2	41/
F.	Other (DESCRIBE) _____	1	2	42/

25. When did you <u>first</u> begin to put aside money for your child's education beyond high school? CIRCLE ONE.

Have not put any money aside	1	43/
Before he/she was in elementary school	2	
When he/she was in elementary school	3	
When he/she was in middle (junior high) school	4	
When he/she was in high school	5	

26. How much money have you put aside for your child's future educational needs? CIRCLE ONE.

None	01	44-45/
Less than $1,000	02	
$1,000 to $3,000	03	
$3,001 to $6,000	04	
$6,001 to $10,000	05	
$10,001 to $15,000	06	
More than $15,000	07	

---

27. About how much money do you expect your child to spend on living expenses (such as room and board and clothing) next year? Include expenses even if they will be paid by a scholarship or loan. (But don't include tuition or other schooling expenses.) CIRCLE ONE.

Almost none-- he/she plans to live at home	01	46-47/
None, for other reasons (DESCRIBE: _____ _____).	02	
Less than $1,000	03	
$1,000 to $2,999	04	
$3,000 to $4,999	05	
$5,000 to $10,000	06	
More than $10,000	07	

---

28. About how much do you expect your child's schooling expenses will be next year? Include expenses for fees, tuition, books, and so on, even if they will be paid by you, a scholarship, or a loan. But don't include the costs of room and board, or other living expenses. CIRCLE ONE.

None	01	48-49/
Less than $500	02	
$500 to $1,000	03	
$1,001 to $2,000	04	
$2,001 to $4,000	05	
$4,001 to $6,000	06	
More than $6,000	07	

29. How do you expect your child will pay for his/her living expenses and schooling expenses (if any) next year? For each source listed below, indicate how much money you expect he/she will receive for expenses between June 1979 and June 1980. If you are not sure, make your best guess. CIRCLE ONE NUMBER ON EACH LINE.

	None	Under $500	$500-$2,000	$2,001-$4,000	Over $4,000	
A. His/her parents or other relatives	1	2	3	4	5	50/
B. His/her husband/wife	1	2	3	4	5	51/
C. His/her earnings, savings	1	2	3	4	5	52/
D. A scholarship	1	2	3	4	5	53/
E. A loan	1	2	3	4	5	54/
F. Other (Write in here: _____)	1	2	3	4	5	55/

30. Have you tried to find out about possible financial aid for education after high school for your child? 56/

Yes ..... 1 ANSWER A

No ..... 2 GO TO Q. 31

A. IF YES: What have you done? CIRCLE ALL THAT APPLY.

1) Talked with high school guidance counselor 01 57-58/
2) Talked with college counselor or representative 02 59-60/
3) Talked with my bank's loan officer 03 61-62/
4) Talked with vocational or trade school counselor 04 63-64/
5) Read U.S. Office of Education material 05 65-66/
6) Read other books, pamphlets on financial aid 06 67-68/
7) Other (DESCRIBE: _____) .. 07 69-70/

BEGIN DECK 73

31. Below is a list of programs that provide loans for study beyond high school. For each program, indicate how much you know about it. CIRCLE ONE NUMBER ON EACH LINE.

	Nothing	A little	A lot	
A. National Direct Student Loan Program	1	2	3	07/
B. Federal Guaranteed Student Loan Program	1	2	3	08/
C. Health Professions Student Loan Program	1	2	3	09/
D. Nursing Student Loan Program	1	2	3	10/
E. A state student loan program	1	2	3	11/
F. College or university student loan programs	1	2	3	12/
G. Regular bank education loan	1	2	3	13/

32. Below is a list of programs that provide scholarships, fellowships, and grants for study beyond high school. For each program, indicate how much you know about it. CIRCLE ONE NUMBER ON EACH LINE.

	Nothing	A little	A lot	
A. Basic Educational Opportunity Grant Program	1	2	3	14/
B. Supplemental Educational Opportunity Grant Program	1	2	3	15/
C. Veterans Administration survivors' benefits or direct benefits (GI Bill compensation or pension)	1	2	3	16/
D. ROTC Scholarship Program	1	2	3	17/
E. Social Security benefits (for students age 18 to 22 who are children of disabled or deceased parents	1	2	3	18/
F. Health Professions Scholarship Program	1	2	3	19/
G. Nursing Scholarship Program	1	2	3	20/
H. Law Enforcement Education Program	1	2	3	21/
I. Veterans Administration Dependents Educational Assistance Program	1	2	3	22/
J. A state scholarship program	1	2	3	23/
K. Scholarship programs for specific colleges or universities	1	2	3	24/
L. Scholarships from private organizations or companies	1	2	3	25/

33. Below is a list of programs which provide an opportunity to earn money while going to school or enrolled in a training program. For each program, indicate how much you know about it. CIRCLE ONE NUMBER ON EACH LINE.

	Nothing	A little	A lot	
A. Comprehensive Employment and Training Act (CETA)	1	2	3	26/
B. College Work-Study program	1	2	3	27/
C. Cooperative education program (Co-op Ed.)	1	2	3	28/

34. Has your child applied for financial aid for his/her education beyond high school? CIRCLE ONE.

Yes 1 29/
No, but plans to apply 2
No, and does not plan to apply 3

35. Which of the following statements about financial aid are true for your family? CIRCLE ALL THAT APPLY.

A. Child will be able to earn all the money he/she will need for schooling beyond high school 1 30/
B. We can pay for the child's further education without getting any outside finances 2 31/
C. The family does not want to go into debt for schooling 3 32/
D. The family income is too high to qualify for a loan or scholarship 4 33/
E. My child's high school grades are not high enough to qualify for a loan or scholarship 5 34/
F. My child's test scores are not good enough to qualify for a loan or scholarship 6 35/
G. Student's from our ethnic group have too much difficulty getting a loan or scholarship 1 36/
H. Too much paper work is required in order to take out a loan 2 37/
I. We have not been able to get much information on how and where to apply for financial aid 3 38/
J. We do not see any way of getting enough money to let the child get more education 4 39/
K. Other sources of outside financing for the child's further education are available to us 5 40/

41-49/R

36. As far as you know, would your child be accepted at . . . CIRCLE ONE NUMBER ON EACH LINE.

	Yes	No	
A. a nearby public junior college	1	2	50/
B. your state university	1	2	51/
C. one of the best private colleges	1	2	52/
D. a well-known vocational or trade school	1	2	53/

37. Which of the following might interfere with your child going on to school or a training program this fall? CIRCLE ALL THAT APPLY.

A. Has no desire to do so	01	54-55/
B. Can get a good job without further schooling	02	56-57/
C. Has low grades in high school	03	58-59/
D. Lacks money for schooling	04	60-61/
E. Has family responsibilities	05	62-63/
F. Would rather get married	06	64-65/
G. Wants to get practical experience first ...	07	66-67/
H. Lacks the high school courses needed for further schooling	08	68-69/
I. Is tired of being a student	09	70-71/
J. Entering the military service	10	72-73/

BEGIN DECK 74

K. None of the above	11	07-08/

38. As things stand now, do you expect your child to have some kind of schooling or training this fall? CIRCLE ONE.

09-10/

Yes, for sure 01
Yes, maybe 02
} GO TO Q. 39

No ..... 03 — SKIP TO Q. 43

39. Concerning the school or training program your child will attend, is it most likely to be... CIRCLE ONE NUMBER IN EACH GROUP.

A.	a four-year college or university-- 1	11/
	OR	
	a two-year junior or community college-- 2	
	OR	
	another type of school or training program? 3	
B.	a state school or training program-- 1	12/
	other public school or training program-- 2	
	OR	
	a private school or program? 3	
C.	in this state-- 1	13/
	OR	
	in another state? 2	

40. How important to you are each of the following in choosing a school or training program for your child to attend? CIRCLE ONE NUMBER ON EACH LINE.

		Not important	Somewhat important	Very important	
A.	Expenses (tuition, books, room and board)	1	2	3	14/
B.	Availability of financial aid such as a school loan, scholarship or grant	1	2	3	15/
C.	Availability of specific courses or curriculum	1	2	3	16/
D.	Reputation in academic areas	1	2	3	17/
E.	Social life	1	2	3	18/
F.	He/She would be able to get away from home	1	2	3	19/
G.	His/Her friends plan to attend	1	2	3	20/
H.	College admission standards not too high	1	2	3	21/
I.	He/She would be able to live at home	1	2	3	22/
J.	He/She would be able to return home frequently because of the nearness of the school or program	1	2	3	23/
K.	A religious environment	1	2	3	24/
L.	Extracurricular activities (sports, music, drama, etc.)	1	2	3	25/

41. Has your child applied for admission to any vocational or trade school, or any training or apprenticeship program?

Yes ..... 1 ANSWER A 26/

No 2

A. IF YES: Has he/she been accepted by at least one school or program?

Yes 1 27/

No 2

---

42. Has your child applied for admission to any college or university?

Yes ..... 1 ANSWER A 28/

No 2

A. IF YES: Has he/she been accepted by at least one college or university?

Yes 1 29/

No 2

The next series of questions are about your educational and work experiences and your feelings and attitudes about various money matters.

43. What is the highest level of education you have completed? CIRCLE ONE 30-31/

Less than high school graduation 01

High school graduation only 02

Vocational, trade, or business school after high school:
- Less than one year 03
- Between one and two years 04
- Two years or more 05

College program...:
- Some college 06
- Finish a two-year program 07
- Finish a four- or five-year program .. 08
- Master's degree or equivalent 09
- Ph.D., M.D., or equivalent 10

44. As you look back, do you feel that you got about the right amount of education? CIRCLE ONE.

No, I got too much	1	32/
No, I didn't get enough	2	
Yes, I got the right amount	3	

45. If you received some schooling after high school, other than on-the-job or company training, how did you pay for it? CIRCLE ALL THAT APPLY.

A. Haven't had any other schooling	1	33/
B. My parents paid for it	2	34/
C. My earnings and savings	3	35/
D. G. I. Bill	4	36/
E. A scholarship	5	37/
F. A loan	6	38/
G. My spouse's earnings and savings	1	39/
H. Employer paid for it	2	40/
I. It was free (EXPLAIN: _____ _____) ..	3	41/
J. Other (DESCRIBE: _____ _____) ...	4	42/

43-49/R

46. How do you feel about each of the following statements? CIRCLE ONE NUMBER ON EACH LINE.

	Agree strongly	Agree	Disagree	Disagree strongly	
A. A working mother of pre-school children can be just as good a mother as the woman who doesn't work.	1	2	3	4	50/
B. It is much better for everyone concerned if the man is the achiever outside the home and the women takes care of the home and family.	1	2	3	4	51/
C. Women are much happier if they stay at home and take care of their children.	1	2	3	4	52/
D. If anything happened to one of the children while the mother was working, she could never forgive herself.	1	2	3	4	53/
E. A pre-school child is likely to suffer if his/her mother works.	1	2	3	4	54/

47. People have many different reasons for borrowing money which they pay back over a period of time.

Would you say it is all right for someone like yourself to borrow money . . . CIRCLE ONE NUMBER ON EACH LINE.

		Yes	No	
A.	To cover expenses due to illness	1	2	55/
B.	To cover the expenses of a vacation trip	1	2	56/
C.	To finance the purchase of a fur coat or jewelry.	1	2	57/
D.	To cover living expenses when income is cut	1	2	58/
E.	To finance children's educational expenses	1	2	59/
F.	To finance the purchase of a car	1	2	60/
G.	To finance the purchase of furniture	1	2	61/
H.	To pay bills which have piled up	1	2	62/

48. Which of the following <u>best</u> represents your feelings about saving money? CIRCLE ONE.

One does not have to save; if things get bad, things will work out somehow	1	63/
One does not have to save if you are covered by health and accident insurance	2	
One should save mostly for old age, with a little in the bank for emergencies	3	
One should save for old age as well as for many other reasons	4	
One should always be concerned about saving whatever the situation may be	5	
Other (DESCRIBE) _____		
_____	6	

49. Do you regularly try to plan how you will use your money? CIRCLE ONE.

Yes	1	ANSWER A
No	2	GO TO Q. 50

A. IF YES: How do you usually plan? Would you say you . . . CIRCLE ONE.

plan for essentials (bills, food, etc.) and spend what is left without planning	1	65/
plan for essentials (bills, food, etc.), spend on what you want without planning, and put what is left in the bank	2	
plan for essentials (bills, food, etc.) and savings and then spend what is left without planning	3	
plan all the money in advance (for essential bills, food, savings, entertainment, etc.)	4	

---

50. For the last year (1978), did you (as a family) spend more money than you made?

Yes	1	66/
No	2	

---

51. Have any of the following caused you financial problems this last year (1978)? CIRCLE ONE NUMBER ON EACH LINE.

		Yes	No	
A.	Layoffs or inability to get a job	1	2	67/
B.	Extra expenses due to having children	1	2	68/
C.	Heavy expenses due to health problems or accidents	1	2	69/
D.	Heavy expenses due to other factors (DESCRIBE) _____	1	2	70/
E.	Poor investments	1	2	71/
F.	Any other reasons (DESCRIBE) _____	1	2	72/

BEGIN DECK 75

52. During the past week, were you working? CIRCLE ONE.

Yes, working full-time	1		07/
Yes, working part-time	2	GO TO Q. 54	
No, I have a job, but was not at work because of temporary illness, vacation, or strike	3		
No	4	ANSWER A	

A. IF NO: What were you doing? CIRCLE ONE.

Unemployed, laid off, looking for work	1	08/
Retired	2	
In school	3	
Keeping house (full-time)	4	
Something else (EXPLAIN)	5	

_____

_____

53. Have you ever held a regular job (include self-employment)? CIRCLE ONE.

Yes	1	ANSWER Q. 54	09/
No	2	SKIP TO Q. 58	

54. Please describe your present or most recent job.

A. What kind of business or industry is (or was) this? (For example: retail store, manufacturer, state or city government, farming, etc.)

(WRITE IN) _____

B. What kind of job or occupation do (or did) you have in this business or industry? (For example: salesperson, auto mechanic, police officer, mail carrier, farmer, teacher)

(WRITE IN) _____

C. What are (or were) your main activities or duties on this job? (For example: selling cars, keeping accounts, supervising others, operating machinery, finishing concrete, teaching grade school)

(WRITE IN) _____

10-12/

13-14/

55. Now we would like to know what you were doing five years ago. Five years ago, were you working? CIRCLE ONE.

Yes, working full-time	1	GO TO Q. 56
Yes, working part-time	2	
No, had a job, but I was not at work because of temporary illness, vacation, or strike	3	
No	4	ANSWER A

A. IF NO: What were you doing? CIRCLE ONE.

Unemployed, laid off, looking for work	1	SKIP TO Q. 57
Retired	2	
In school	3	
Keeping house (full-time)	4	
Something else (EXPLAIN)	5	

16/

_____

_____

56. Is this the same kind of work as the job you hold now? CIRCLE ONE.

Yes	1	GO TO Q. 57
No	2	ANSWER A

17/

A. IF NO: If this is not the same kind of work as the job you hold now, would you please describe this job below.

1) What kind of business or industry was this? (For example: retail store, manufacturer, state or city government, farming, etc.)

(WRITE IN) _____

2) What kind of job or occupation did you have in this business or industry? (For example: salesperson, auto mechanic, police officer, mail carrier, farmer, teacher)

(WRITE IN) _____

3) What were your main activities or duties on this job? (For example: selling cars, keeping accounts, supervising others, operating machinery, finishing concrete, teaching grade school)

(WRITE IN) _____

18-20/

21-22/

57. Did you usually have a job during the following periods of your child's life? CIRCLE ONE NUMBER ON EACH LINE.

	Did not work	Worked part time	Worked full time	
A. When he/she was in high school	1	2	3	23/
B. When he/she was in elementary school	1	2	3	24/
C. Before he/she went to elementary school	1	2	3	25/

58. Do you think you will be working five years from now? If you are not sure, give your best guess. CIRCLE ONE.

Yes, working full-time 1 26/
Yes, working part-time 2
No 3

59. What is your current marital status? CIRCLE ONE.

Married ..... 1 GO TO Q. 60 27/
Widowed 2
Divorced 3
Separated 4
Never married 5
} SKIP TO Q. 69

60. What is the highest level of education your husband/wife has completed? CIRCLE ONE.

Less than high school graduation 01 28-29/
High school graduation only 02

Vocational, trade, or business school after high school
- Less than one year 03
- Between one and two years 04
- Two years or more 05

College program...
- Some college 06
- Finish a two-year program 07
- Finish a four- or five-year program .. 08
- Master's degree or equivalent 09
- Ph.D., M.D., or equivalent 10

DECK 75

61. During the past week, was your husband/wife working? CIRCLE ONE.

Yes, working full-time	1	GO TO Q. 63	30/
Yes, working part-time	2		
No, he/she has a job, but was not at work because of temporary illness, vacation, or strike	3		
No	4	ANSWER A	

A. IF NO: What was he/she doing? CIRCLE ONE.

Unemployed, laid off, looking for work	1	31/
Retired	2	
In school	3	
Keeping house (full-time)	4	
Something else (EXPLAIN)	5	

_____

_____

---

62. Did he/she ever hold a regular job (include self-employment)? CIRCLE ONE. 32/

Yes	1	GO TO Q. 63
No	2	SKIP TO Q. 66

---

63. Please describe his/her present or most recent job.

A. What kind of business or industry is (or was) this? (For example: retail store, manufacturer, state or city government, farming, etc.)

(WRITE IN) _____

B. What kind of job or occupation do (or did) he/she have in this business or industry? (For example: salesperson, auto mechanic, police officer, mail carrier, farmer, teacher)

(WRITE IN) _____

C. What are (or were) his/her main activities or duties on this job? (For example: selling cars, keeping accounts, supervising others, operating machinery, finishing concrete, teaching grade school)

(WRITE IN) _____

33-35/

36-37/

64. Now we would like to know what your current husband/wife was doing five years ago. Five years ago, was he/she working? CIRCLE ONE.

Yes, working full-time	1	GO TO Q. 65	38/
Yes, working part-time	2		
No, had a job, but not at work because of temporary illness, vacation, or strike	3		
No	4	ANSWER A	

A. IF NO: What was he/she doing? CIRCLE ONE.

Unemployed, laid off, looking for work	1	SKIP TO Q. 66	39/
Retired	2		
In school	3		
Keeping house (full-time)	4		
Something else (EXPLAIN)	5		

_____

_____

65. Is this the same kind of work as the job he/she holds now? CIRCLE ONE.

Yes	1	GO TO Q. 66	40/
No	2	ANSWER A	

A. IF NO: If this is not the same kind of work as the job he/she holds now, would you please describe this job below?

1) What kind of business or industry was this? (For example: retail store, manufacturer, state or city government, farming, etc.)

(WRITE IN) _____

2) What kind of job or occupation did he/she have in this business or industry? (For example: salesperson, auto mechanic, police officer, mail carrier, farmer, teacher)

(WRITE IN) _____

3) What were his/her main activities or duties on this job? (For example: selling cars, keeping accounts, supervising others, operating machinery, finishing concrete, teaching grade school)

(WRITE IN) _____

41-43/

44-45/

66. Do you think your husband/wife will be working five years from now? If you are not sure, give your best guess. CIRCLE ONE.

Yes, working full time 1
Yes, working part time 2
No 3

---

67. How much has your husband/wife influenced your child's plans for after high school? CIRCLE ONE. 47/

Not at all 1
Somewhat 2
A great deal 3
Don't know 8

---

68. Has your husband/wife usually had a job during the following periods of your child's life? CIRCLE ONE NUMBER ON EACH LINE.

	Did not work	Worked part time	Worked full time	
A. When the child was in high school	1	2	3	48/
B. When the child was in elementary school	1	2	3	49/
C. Before the child went to elementary school	1	2	3	50/

This final series of questions is about the present situation of you and your family. We need this information in order to compare your answers with those of other people who take part in this survey. And remember, this information will be kept private and it will never be used with your name.

69. Are you male or female? CIRCLE ONE.

Male	1	51/
Female	2	

70. In what year were you born?

				52-55/

Year

71. OMITTED. GO TO THE NEXT QUESTION.

56-61/R

72. Altogether, how many people are dependent upon you (or you and your husband/wife)? Count everyone who receives one-half or more of their financial support from you or your husband/wife, but do not include yourself or your husband/wife.

TOTAL NUMBER OF DEPENDENTS _____ 62-63/

(Not counting you or your husband/wife)

73. How many sons and daughters are there who are older, the same age, and younger than the child named on the front cover of this booklet? Please include stepsons and stepdaughters if they live, or have lived, in your home. CIRCLE ONE NUMBER ON EACH LINE.

		None	One	Two	Three	Four	Five or more	
Sons	a. Older	0	1	2	3	4	5	64/
	b. Same age	0	1	2	3	4	5	65/
	c. Younger	0	1	2	3	4	5	66/
Daughters .	a. Older	0	1	2	3	4	5	67/
	b. Same age	0	1	2	3	4	5	68/
	c. Younger	0	1	2	3	4	5	69/

74. How many of the children referred to in Question 73 will be in school beyond high school--a college, university, or vocational, trade, or business school--this fall?

None	0
One	1
Two	2
Three	3
Four or more	4

---

75. The following categories are used to describe people. Which category would you use to describe yourself? CIRCLE ONE.

American Indian or Alaskan Native	01	71-72/
Asian or Pacific Islander (includes: Chinese, Japanese, Filipino, Korean, Vietnamese, Pacific Islander, Asian Indian, or other Asian)	02	
Hispanic or Spanish:		
Mexican, Mexican-American, Chicano	03	
Cuban, Cubano	04	
Puerto Rican, Puertorriqueno	05	
Other Latin American, Latino, Hispanic or Spanish descent	06	
Black, not of Hispanic origin	07	
White, not of Hispanic origin	08	

BEGIN DECK 76

76. What language do the people in your home usually speak? CIRCLE ONE.

English	01	07-08/
Spanish	02	
Italian	03	
Chinese	04	
French	05	
German	06	
Greek	07	
Portuguese	08	
Other (SPEFICY) _____	09	

77. What other language is spoken in your home? CIRCLE ONE.

No other	01	09-10/
English	02	
Spanish	03	
Italian	04	
Chinese	05	
French	06	
German	07	
Greek	08	
Portuguese	09	
Other (SPECIFY) _____	10	

78. Which of the following do you have in your home? CIRCLE ONE CODE FOR EACH LINE.

		Have	Do not have	
A.	A specific place for children to study	1	2	11/
B.	A daily newspaper	1	2	12/
C.	Dictionary	1	2	13/
D.	Encyclopedia or other reference books	1	2	14/
E.	Magazines	1	2	15/
F.	Tape recorder or cassette player	1	2	16/
G.	Record player	1	2	17/
H.	Color television	1	2	18/
I.	Typewriter	1	2	19/
J.	Electric dishwasher	1	2	20/
K.	Two or more cars or trucks that run	1	2	21/
L.	More than 50 books	1	2	22/

As you know, we plan to keep in touch with your child and thousands of high school students like him/her for the next few years and to see how their plans worked out, how they have changed, and what they would do differently if they had to do it over again. An important part of this study is to see what happens to children from different backgrounds, especially those from various income groups. It is important, therefore, that you complete this last section about your financial situation. In most cases, we do not ask for exact amounts of money but only for ranges of income. This information will be sufficient to place you and your family into one of many income groups representing all families in the United States.

79. Do you own or rent the house, apartment, condominium, or mobile home in which you now live?

Own	1	GO TO Q. 80	23/
Rent	2	SKIP TO Q. 85	
Other	3		

80. How much would the house, condominium, apartment, or mobile home in which you now live sell for right now?

$ _____ 24-29/

81. Do you or anyone in your family owe any money on the house, condominium, apartment, or mobile home in which you now live?

Yes	1	GO TO Q. 82	30/
No	2	SKIP TO Q. 84	

82. About the mortgage, loan, or land contract on your home. If you have more than one mortgage, provide information about the first morgage only.

A. How much of the <u>principal</u> do you still owe on the mortgage, loan, or land contract for this dwelling? Please enter the amount you still owe not counting interest or charges on the loan. $ _____ 31-36/

B. What was the amount of the loan when you first borrowed the money? If it is a refinanced loan, please enter the total amount after refinancing. $ _____ 37-42/

C. In what year did you first take out the loan? 19 _____ 43-44/

D. What is the interest rate on the loan? _____% 45-48/

83. Do you have a second mortgage on your house, condominium, or apartment?

Yes	1	ANSWER A	49/
No	2	GO TO Q. 84	

A. IF YES: How much of the principal do you still owe on that mortgage? Please enter the amount you will owe not counting interest or charges on the loan. $ _____ 50-55/

84. A. Have you considered refinancing or taking a second mortgage on your home to help pay for your child's education beyond high school?

Yes	1	56/
No	2	

B. Suppose you were given a chance to refinance or take a second mortgage on your home to help pay for your child's education beyond high school under the following interest rates. Would you refinance or take a second mortgage if the interest rates were ...

	Yes	No	
a. at current average rates in your area	1	2	57/
b. at a rate 3 percentage points less than the current rate in your area	1	2	58/
c. at the rate which you took out the first mortgage or loan	1	2	59/

BEGIN DECK 77

For this first section on your financial situation do not write down the exact amount of money, but only fill in the code letter from the box below that comes closest to the right amount.

For example: Suppose you and your husband/wife received $1,250 in dividends in 1978.

1) From the box below, $1,250 is between $1,000 and $2,999.
2) The code for an amount between $1,000 and $2,999 is D.
3) Write D in the box to the right of dividends.

Dividends ..... [D]

For those types of income that you do not have, write in the letter "0" in the box.

IF YOU ARE NOT SURE ABOUT THE AMOUNT FOR SOME TYPES OF INCOME, PLEASE ESTIMATE.

None 0	$7,500 - $9,999 ..... G	$50,000 - $74,999 ... M
Less than $100 ..... A	$10,000 - $14,999 .... H	$75,000 - $99,999 ... N
$100 - $499 ..... B	$15,000 - $19,999 I	$100,000 - $199,999 . P
$500 - $999 C	$20,000 - $24,999 .... J	$200,000 - $299,999 . R
$1,000 - $2,999 ..... D	$25,000 - $34,999 .... K	$300,000 - $499,999 . S
$3,000 - $4,999 ..... E	$35,000 - $49,999 L	$500,000 or more .... T
$5,000 - $7,499 ..... F		

85. About your income in 1978...

Letter Code

A. How much did you receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else? ..... [ ] 07-08/

B. How much income did you receive from working on your own or in your own business or farm? (Net income, that is, income after expenses) ..... [ ] 09-10/

---

86. About the income of your husband/wife in 1978...

(IF A ONE PARENT FAMILY, CHECK BOX [ ] AND GO TO Q. 87.

A. How much did your husband/wife receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else? ..... [ ] 11-12/

B. How much income did your husband/wife receive from working on their own or in their own business or farm? (Net income, that is, income after expenses) .... [ ] 13-14/

87. For the following types of income, please use the code letters listed in the box on the previous page.

If a two-parent family, combine the income of you and your husband/wife.

Do not include any income of your child(ren).

For those types of income that you do not have, write the letter "0" in the box

	Letter Code	
A. Dividends	☐	15-16/
B. Interest	☐	17-18/
C. Trust funds	☐	19-20/
D. Rent	☐	21-22/
E. Royalties	☐	23-24/
F. Social Security	☐	25-26/
G. Pensions or annuities	☐	27-28/
H. Other retirement pay	☐	29-30/
I. Unemployment benefits, or strike benefits	☐	31-32/
J. Non-taxable gifts or inheritances	☐	33-34/
K. Child support payments	☐	35-36/
L. Alimony	☐	37-38/
M. Foster child payments	☐	39-40/
N. Aid to Families with Dependent Children (AFDC)	☐	41-42/
O. Supplemental Security Income (SSI)	☐	43-44/
P. Financial help from relatives	☐	45-46/
Q. Roomers or boarders	☐	47-48/

FAMILY FINANCIAL SUMMARY

88. When filling out this summary of family finances, consider the assets and debts of you and your husband/wife but <u>not</u> those of your child(ren).

In completing this section, do not write down the exact amount of money, but choose from the box below, the <u>code letter</u> that comes closest to the right amount of money.

For those types of income that you do not have, write the letter "0" in the box.

IF YOU ARE NOT SURE ABOUT THE AMOUNT FOR SOME TYPES OF ASSETS AND DEBTS, PLEASE ESTIMATE.

None 0	$7,500 - $9,999 ..... G	$50,000 - $74,999 ... M
Less than $100 ..... A	$10,000 - $14,999 .... H	$75,000 - $99,999 ... N
$100 - $499 ..... B	$15,000 - $19,999 I	$100,000 - $199,999 . P
$500 - $999 C	$20,000 - $24,999 .... J	$200,000 - $299,999 . R
$1,000 - $2,999 ..... D	$25,000 - $34,999 .... K	$300,000 - $499,999 . S
$3,000 - $4,999 ..... E	$35,000 - $49,999 L	$500,000 or more .... T
$5,000 - $7,499 ..... F		

Assets

Item	Letter Code	
A. Amount in checking account	☐	49-50/
B. Amounts in savings accounts or shares:		
1. Bank (include certificates of deposit)	☐	51-52/
2. Savings and loan association	☐	53-54/
3. Credit union	☐	55-56/
C. Approximated amount invested in U.S. Government Savings Bonds.....	☐	57-58/
D. Approximate amount invested in common and preferred stocks and mutual funds	☐	59-60/

BEGIN DECK 78

88. Continued

Assets (Continued)

Item	Letter Code	
E. Amount invested in other marketable securities (e.g., other bonds or commodities)	☐	07-08/
F. Amount of principal paid off to date on land and real estate (other than home or apartment)	☐	09-10/
G. Cash value of life insurance policies	☐	11-12/
H. Cash value of pension plans	☐	13-14/
I. Value of livestock and farm equipment	☐	15-16/
J. Value of business	☐	17-18/

Debts

Item	Letter Code	
A. Amount still owed on:		
1. Land and real estate (other than home or apartment)	☐	19-20/
2. Livestock and farm equipment	☐	21-22/
3. Auto loan	☐	23-24/
4. Business	☐	25-26/
B. Debts on personal property (e.g., unpaid balance on furniture, other credit accounts, etc.)	☐	27-28/
C. Amount owed to friends and relatives	☐	29-30/
D. Other personal debts (e.g., finance company loan, bank loan, credit union loan, etc.)	☐	31-32/

APPENDIX B

Financial Aid Forms

R

ACT STUDENT DATA FORM 1980-81

If you are applying only for a Basic Grant, do not fill out this form. Otherwise, complete this form and mail it to ACT with your 1980-81 Family Financial Statement (FFS).

Please Print Using Black Ink

ACT USE ONLY

C	INT
SO	SF
AC	

STUDENT INFORMATION

WHAT SCHOOLS OR AGENCIES SHOULD RECEIVE THIS FORM?
(Enter the ACT codes from item 77 of your FFS.)

1st Choice | 2nd Choice | 3rd Choice | 4th Choice

1. NAME (last, first, middle)

2. PERMANENT MAILING ADDRESS (number, street, apt. no., city, state, zip code)

3. PHONE ( )

4. SOCIAL SECURITY NUMBER (optional)

5. SEX (optional) ☐ Male ☐ Female

6. STATUS DURING 1980-81 SCHOOL YEAR
☐ Full-time student ☐ Half-time student ☐ Less than half-time student

7. CLASSIFICATION DURING 1980-81 SCHOOL YEAR
☐ Incoming freshman ☐ Continuing/returning ☐ Transfer student

8. MAJOR AREA OF STUDY

9. WHERE WILL YOU LIVE DURING THE 1980-81 SCHOOL YEAR?
☐ On campus ☐ With parents ☐ Off campus
If you are sending reports to more than one school, and your living plans will be different for each school, explain in item 16 below.

10. INDICATE FINANCIAL AID PREFERENCE (enter 1 for first choice, etc.)
___Grant
___Long-term loan
___Part-time work
___Academic scholarship
___Athletic scholarship (name sponsor) _____
___Other (specify) _____

PARENTAL INFORMATION

11. FATHER/STEPFATHER (name, address, city, state, zip code)

OCCUPATION

EMPLOYER (name) NO. OF YRS. WITH

12. MOTHER/STEPMOTHER (name, address, city, state, zip code)

OCCUPATION

EMPLOYER (name) NO. OF YRS. WITH

13. NAMES AND AGES OF PARENTS' DEPENDENTS

1. Name	Age	3. Name	Age	5. Name	Age
2. Name	Age	4. Name	Age	6. Name	Age

14. STUDENT'S ESTIMATED RESOURCES

INCOME AVAILABLE TO MEET EXPENSES DURING TERM(S) FINANCIAL AID IS DESIRED

Parental savings	$
Total summer earnings $ ___ amount saved for school	$
Earnings while in school (exclude College Work-Study)	$
Parental support	$
Spouse's income	$
Social Security benefits	$
Veterans benefits/War Orphans benefits	$
Welfare benefits	$
Alimony	$
Scholarship received (name source)	$
Private loans	$
Other income (name source)	$
TOTAL INCOME	$

15. MARRIED STUDENTS (OR SINGLE WITH DEPENDENTS)

NUMBER OF DEPENDENTS ___ AGES

SPOUSE'S NAME

SOCIAL SECURITY NO. (optional) AGE

SPOUSE'S OCCUPATION

SPOUSE'S EMPLOYER

SPOUSE'S GROSS EARNINGS FROM JULY 1, 1980 TO JUNE 30, 1981 $

WILL YOUR SPOUSE BE A STUDENT DURING 1980-81? ☐ Yes ☐ No

IF YES, AT WHICH SCHOOL OR COLLEGE?

WILL YOUR SPOUSE APPLY FOR FINANCIAL AID FOR 1980-81? ☐ Yes ☐ No

16. If there are any unusual circumstances that seriously affect your family's financial situation, you may explain them here. If you need more space, use the back of this form.

ACT will send copies of this form to the schools and programs you codes on your FFS. Information that you give on this form won't affect the analyses done by ACT. But school financial aid administrators can use it when they consider you for aid.

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FAMILY FINANCIAL STATEMENT (FFS) 1980-81

THE AMERICAN COLLEGE TESTING PROGRAM

R

- DO NOT complete this form before January 1, 1980.
- Do not use this form after March 15, 1981.
- Use only a soft (No. 2) lead pencil. DO NOT use ink anywhere on this form.
- Please read the instructions carefully as you complete this form.

WARNING: If you use this form to establish your eligibility for federal student aid funds, you should know that any person who makes false statements or misrepresentations on this form is subject to a fine or to imprisonment, or both, under provisions of the United States Criminal Code.

A. STUDENT'S INFORMATION

1 Student's name (use a soft lead pencil only)

Last name | First name | MI

2,3 Student's permanent mailing address (continued in questions 4 and 5)

House number, street name, P.O. box, etc. | City (do not enter state in this area)

4 State code

5 Zip code

6 Student's social security number

7 Student's date of birth — Month | Day | Year

8 The student is
- a. A U.S. citizen
- b. An eligible non-citizen (see instructions)
- c. Neither of the above (see instructions)

9 The student is
- Unmarried
- Married
- Separated

10 Will the student have received a Bachelor's degree by July 1, 1980?
- Yes (see instructions)
- No

11 Student's year in school during 1980-81
- 1st (freshman)
- 2nd (sophomore)
- 3rd (junior)
- 4th (senior)
- 5th (working toward)
- Graduate or professional (beyond a Bachelor's degree)

12 Student's state of legal residence (see instructions)

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155

B. **STUDENT'S STATUS**

Read the instructions to find out what events in the student's period before you answer questions 12, 14, and 16.

12	Did or will the student live with parents for more than six months	In 1979? ○ Yes ○ No	In 1980? ○ Yes ○ No
14	Did or will the parents claim the student as an income tax exemption	In 1979? ○ Yes ○ No	In 1980? ○ Yes ○ No
16	Did or will the student get more than 1/2 support from the parents	In 1979? ○ Yes ○ No	In 1980? ○ Yes ○ No

If you answered "Yes" to any of the questions in Section B, complete pages 3 and 4 of this form; skip Section C below.

If you answered "No" to all 6 of the questions in Section B, complete Section C below and go on to page 4; skip page 3.

Note: All students must answer the questions on page 4.

C. **STUDENT'S (AND SPOUSE'S) FINANCIAL STATEMENT—Round all figures to dollars; do not enter cents.**

16 Did or will the student, or spouse file a 1979 U.S. income tax return? ○ Yes (go on to question 17) ○ No (skip to question 27)

17 The 1979 U.S. income tax return figures are ○ From a completed return ○ Estimated (see instructions)

18 Total number of 1979 exemptions claimed

19 1979 Adjusted gross income

20 1979 Total U.S. income tax paid

21 1979 Total itemized deductions

22,23 1979 Income earned from work by Student / Spouse

24,25 1979 Nontaxable income (See instructions) Social security / Other nontaxable income

26 1979 Medical and dental expenses not paid by insurance

27 1979 Elementary, jr. high, & high school tuition paid

28 Cash, savings, and checking accounts

29,30 Home — What is it worth now? / What is owed on it?

31,32 Other real estate & investments — What is it worth now? / What is owed on it?

33,34 Business and farm — What is it worth now? / What is owed on it?

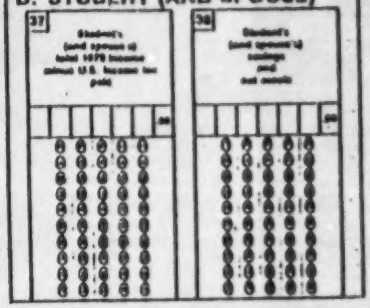
35 For the tax year of the student's household in 1980-81 — Include the student, spouse, and student's children who will receive more than half support from the household in 1980-81. Include other dependents if they meet the definition in the instructions

36 Of the number in question 35, how many will be in college during 1980-81? — Include persons who will be enrolled in college at least half time

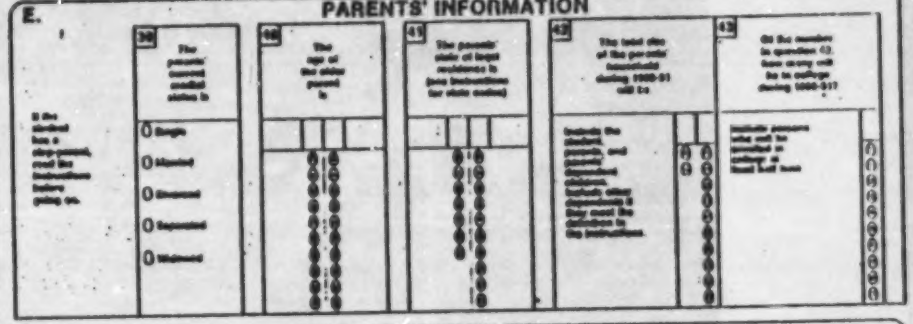
If you completed Section C above, go on to page 4; skip page 3.

Answer the questions on this page if (and only if) any answer in Section B is "Yes."

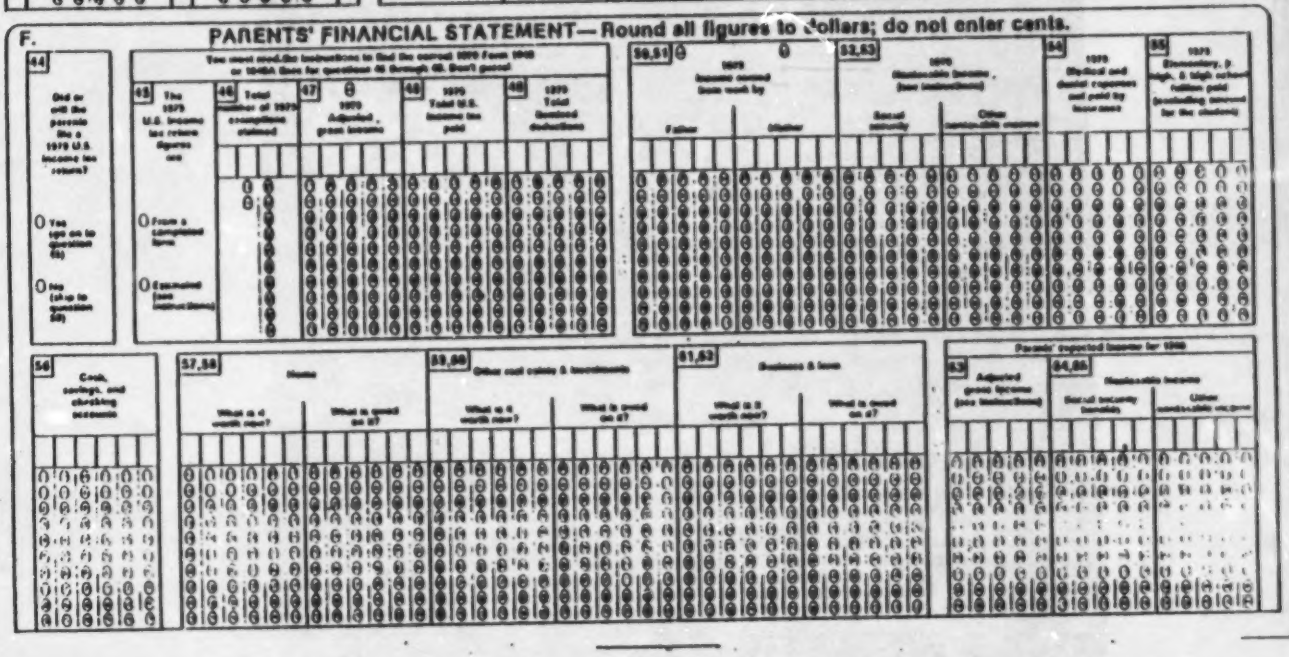
D. STUDENT (AND SPOUSE)



E. PARENTS' INFORMATION



F. PARENTS' FINANCIAL STATEMENT— Round all figures to dollars; do not enter cents.



PAGE 4 DO NOT USE INK ON THIS FORM

G. OTHER STUDENT INFORMATION AND BASIC GRANT RELEASE

H. TELEPHONE

REMINDERS

1. Please check to make sure that every question has been answered (except those in sections you've been told to skip).
2. ERASURES: If you have erased any oval, be sure that the oval for the correct answer (or the zero oval) has been blackened in that column. Otherwise, the computer may read the pressure as your answer.
3. Make sure that your name and address are accurately entered on page 1 so that ACT, the Basic Grant Program, and the colleges and programs can contact you.
4. Be sure you are considered for all the money for which you qualify. If you will be an undergraduate student in 1980-81, apply for a Basic Grant. You should also apply to each college you are considering. See question 75.
5. Don't forget to sign this form and to have your parents sign it if their information is given.
6. Keep the FFS instruction booklet. You will need to refer to it later.

I. REQUEST FOR REPORTS, CERTIFICATION, AND SIGNATURES

financial Aid form

ILLINOIS

ACADEMIC YEAR 1979-80

COLLEGE SCHOLARSHIP SERVICE OF THE COLLEGE BOARD

WHAT IS THE FINANCIAL AID FORM?

The *Financial Aid Form (FAF)* is a document used to collect information for determining a student's need for financial aid. You submit the FAF to the College Scholarship Service (CSS), an activity of the College Board, where it is analyzed. The information you report on the FAF is confidential and is sent only to the recipients you indicate.

The CSS does not award financial aid; rather it evaluates your financial ability to contribute to the costs of education beyond high school.

The FAF may be used to apply for:

- the Basic Educational Opportunity Grant Program
- many state scholarship and grant programs
- financial aid administered by colleges and other institutions of education beyond high school

The decision to award financial aid rests with the individual institutions and programs, which directly inform students whether or not they are eligible for financial aid. Some of these may also request completion of separate financial aid applications.

WHO COMPLETES THE FAF?

The FAF is completed by parents, *in behalf of their children*, and by students who are applying for financial aid for the academic year 1979-80.

If you answer "Yes" to ANY part of Items 13, 14, or 15 for ANY of the years indicated, your parents MUST complete the parents' section (Items 17-40) of the FAF. Refer to the definition of "parents" in the Instructions for Completing the FAF.

Even if you answer "No" to Items 13, 14, and 15 for all years, the institution you are applying to may require parents' information. You should follow any specific instructions you receive from the institution or program.

When parents' information is required and your parents are separated or divorced, Items 17-40 should be completed by the parent who has (or had) custody of you. Information may also be required of parent's present spouse, if any. See the Instructions for Completing the FAF.

Student's information (Items 1-16 and 40 and following) should be completed by *all* students.

WHEN SHOULD THE FAF BE COMPLETED?

The FAF should be completed *after January 1, 1979*. Mail this form as soon as possible, preferably at least one month or more before the earliest financial aid deadline for the institutions and programs you list to receive the FAF.

Do not file this FAF *after March 15, 1980*.

It is not necessary to delay filing the FAF until the 1978 U.S. income tax return is filed. If the 1978 return has not been filed, estimate amounts you expect to report on the return.

WHAT PROCEDURES ARE FOLLOWED TO ENSURE ACCURACY?

It is important that you provide accurate and complete information on the FAF. Failure to do so may jeopardize your request for financial aid.

If you use the FAF to establish eligibility for federal student financial aid funds, you should know that *any person who intentionally makes false statements or misrepresentations on this form is subject to fine, or to imprisonment, or to both, under provisions of the United States Criminal Code.*

In order to ensure accurate reporting of data on the FAF, the CSS may request authorization to obtain an official copy of the parents' or student's 1978 U.S. income tax return from the Internal Revenue Service (IRS). Do not send any income tax returns with the FAF to the CSS. Your authorization and any tax returns obtained by using the authorization are confidential and are not sent to institutions and programs. Some institutions and programs may request that you send a copy of your income tax return to them. If so, send it directly to the requesting institution. Failure to provide requested documentation may result in denial of aid.

WILL THE CSS SEND AN ACKNOWLEDGMENT?

If an institution or program is listed in Item 81, the CSS will send you an Acknowledgment when processing of your FAF has been completed. The Acknowledgment includes an Additional College Request (ACR) form for you to submit if you later want copies of the FAF sent to institutions or programs not originally listed. The fee for ACR processing is $3.50 for the first institution or program later designated to receive a copy of the FAF and $2.50 for each additional one.

WHAT IS MY CSS ESTIMATED CONTRIBUTION?

Your estimated contribution is the amount of money the CSS calculates you and your family are able to provide for the expenses of college or other education beyond high school. Each institution or program has final responsibility for determining your contribution. This figure may differ from the CSS estimated contribution.

The CSS estimate is provided as part of the Acknowledgment and is sent with explanatory material. If you want to receive the report of CSS Estimated Contribution, add $1.00 to the processing fee and check the appropriate box in Item 82.

WHAT IS THE FEE FOR FILING THE FAF?

The CSS processing fee is $4.75 for the first institution or program designated to receive a copy of the FAF and $2.50 for each additional one. If you are requesting the report of your CSS Estimated Contribution, you should include an additional fee of $1.00.

The fee covers the costs of analyzing the FAF and sending copies of the FAF and the analysis to institutions and programs. Please make your check or money order payable to the College Scholarship Service. *Do not send cash.*

There is no charge for using the FAF to apply for the Basic Educational Opportunity Grant (BEOG) Program.

WHERE TO MAIL THE FAF

Mail your completed FAF in the attached envelope to the appropriate CSS office listed below.

COLLEGE SCHOLARSHIP SERVICE
Box 2910
Princeton, NJ 08541

OR

COLLEGE SCHOLARSHIP SERVICE
Box 230
Berkeley, CA 94701

IF YOU LIVE IN:				IF YOU LIVE IN:			
Alabama	AL	New Hampshire	NH	Alaska	AK	Nebraska	NE
Canal Zone	CZ	New Jersey	NJ	American Samoa	AS	Nevada	NV
Connecticut	CT	New York	NY	Arizona	AZ	New Mexico	NM
Delaware	DE	North Carolina	NC	Arkansas	AR	North Dakota	ND
District of Columbia	DC	Ohio	OH	California	CA	Oklahoma	OK
Florida	FL	Pennsylvania	PA	Colorado	CO	Oregon	OR
Georgia	GA	Puerto Rico	PR	Guam	GU	South Dakota	SD
Idaho	ID	Rhode Island	RI	Hawaii	HI	Texas	TX
Illinois	IL	South Carolina	SC	Idaho	ID	Trust Territory of the Pacific Islands	TT
Kentucky	KY	Tennessee	TN	Illinois	IL	Utah	UT
Louisiana	LA	Vermont	VT	Iowa	IA	Vermont	VT
Maine	ME	Virgin Islands	VI	Kansas	KS	Virginia	VA
Maryland	MD	Virginia	VA	Minnesota	MN	Washington	WA
Massachusetts	MA	West Virginia	WV	Missouri	MO	Wyoming	WY
Michigan	MI	Wisconsin	WI	Montana	MT		
Mississippi	MS						

If where you live is not listed above, send your FAF to the CSS office in Princeton, NJ.

BASIC EDUCATIONAL OPPORTUNITY GRANT PROGRAM

GENERAL INFORMATION

The Basic Educational Opportunity Grant (BEOG) Program is a Federal student aid program designed to provide financial assistance, in the form of a grant (which need not be repaid) to those who need it to attend colleges and other institutions offering education beyond high school. The amount of the BEOG is determined according to your own and your family's financial resources. It is estimated that grants will range from $200 to $1,000 during the 1979-80 academic year.

This form may be used to apply for a BEOG and/or for financial assistance from institutions, states, and other programs. As a result of completing this form, you may be found eligible to receive BEOG assistance for any period of enrollment beginning July 1, 1979, through June 30, 1980.

To use this form to apply to the BEOG Program, you must check "Yes" in item 83 and file the FAF after January 1, 1979. The CSS will forward the necessary information to the BEOG Program at no cost to you. The deadline for receipt of this form for purposes of applying to the BEOG Program is March 15, 1980. If you want, in addition, to have the CSS send copies of this FAF to institutions and programs, you must enter them in item 81 and enclose the appropriate fee.

STUDENT ELIGIBILITY

You will be eligible for a Basic Grant if you meet all of the following criteria:

1. You have established your financial need for a BEOG by means of this form.
2. You will be enrolled (at least half-time) in an undergraduate course of study in an eligible program at one of over 6,000 institutions approved for participation in the BEOG Program.
3. You will not have previously received a bachelor's degree from any institution.
4. You are a U.S. citizen or meet the criteria stated in the instructions for Item 8.
5. You will have received no more than four full years of BEOG payments. Exception: you may receive BEOG assistance for five years only when the institution either: (a) designed the program of study leading to a bachelor's degree to be up to five years in length, or (b) required your enrollment in a remedial course of study which meant you were unable to complete the regular program in four academic years.

Within six weeks after you mail this form to the CSS, you will receive a Student Eligibility Report (SER) from the BEOG Program. The SER is the official notification of your eligibility for a BEOG and must be presented to the school you will attend to determine the amount of your grant. When you receive the SER, carefully read and follow the instructions it contains.

BEOG SPECIAL CIRCUMSTANCES

If you experience a dramatic change in income from 1978 to 1979, you may be eligible to apply for a BEOG based on estimated 1979 income rather than actual 1978 income. For further details regarding your eligibility to apply for a BEOG in this manner, contact your high school guidance counselor or financial aid administrator and ask about the BEOG Supplemental Form.

ADDITIONAL INFORMATION

If you would like to receive additional information on the BEOG Program, as well as general information on student financial aid, please write to: BEOG, Box 84, Washington, DC 20044. Ask for a copy of the *Student Guide*.

NOTICE TO APPLICANTS

INFORMATION COLLECTED ON THIS FORM FOR BASIC GRANT PURPOSES

Subsection (e)(3) of the Privacy Act of 1974 (5 U.S.C. 552a) requires that an agency inform each individual whom it asks to supply information: (1) the authority (whether granted by statute, or by executive order of the President) which authorizes the solicitation of the information and whether disclosure of such information is mandatory or voluntary; (2) the principal purpose or purposes for which the information is intended to be used; (3) the routine uses which may be made of the information as published in the Federal Register; and (4) the effects, if any, of not providing all or any part of the requested information.

1. The authority for collecting the requested information is section 411(b)(2) of Title IV – A – 1 of the Higher Education Act of 1965, as amended (20 U.S.C. 1070a(b)(2)). Applicants are advised that, except as noted in paragraph 4, the disclosure of the requested information is mandatory.
2. This information is being collected in order to calculate a student's eligibility index under the BEOG. The eligibility index is one of the three factors used in determining the amount, if any, of the applicant's BEOG.
3. The "routine uses," as defined in 5 U.S.C. 552a(a)(7), which may be made of the information collected are: An applicant's name, address, social security number, date of birth and eligibility index will be provided to the institution of higher education which the applicant indicates he or she is attending or will attend and to the State scholarship agency of the applicant's state of legal residence if such an agency has an agreement with the Commissioner of Education permitting it to receive such information. Such information will be used by the State agency in coordinating its program of student financial aid with the BEOG Program. Furthermore, on request, information may be provided to members of Congress who inquire on behalf of a student who is a constituent or, where appropriate, on behalf of the parents of the student. In addition, the routine uses listed in Appendix B of 45 CFR 5b may be utilized.
4. Applicants must provide information for all of the following items in order to have their application for a BEOG award processed: Items 1-3, 5, 7, 8, 9B, 13-15, 23, and the Certification and Authorization section. In addition, if the applicant answers "Yes" for any question for any year in items 13-15, then items 16, 17A (1978), 17B (1979), 19 (1978), 20 (1979), 21 (1978), 23, 24, 28-38, 39-52, 48-60, 65, and 68-71 must be completed. If the applicant answers "Yes" to all years and all questions in items 13-15, then items 49 (1978), 50 (1979), 53 (1978), 53 (1979), 57-64 (1978), 63-64 (1979), 68-71, 74A, 74B, 75 and 79 must be completed.

Students need not complete items 6, 9A, 10 (institution choices), and 84; however, answering these items will facilitate the administration of state student assistance programs. Failure to answer item 84 will be considered a "No" response to that item.

Responses to all other items are voluntary with regard to the BEOG Program.

USE OF SOCIAL SECURITY NUMBER

Section 7(b) of the Privacy Act of 1974 (U.S.C. 552a) requires that when any Federal, State, or local government agency requests an individual to disclose his or her social security account number, that individual must also be advised whether that disclosure is mandatory or voluntary, by what statutory or other authority the number is solicited, and what uses will be made of it. Accordingly, applicants are advised that disclosure of their social security account number (SSAN) is required as a condition for participation in the BEOG. In view of the practical administrative difficulties which the program would encounter in maintaining adequate program records without the continued use of the SSAN.

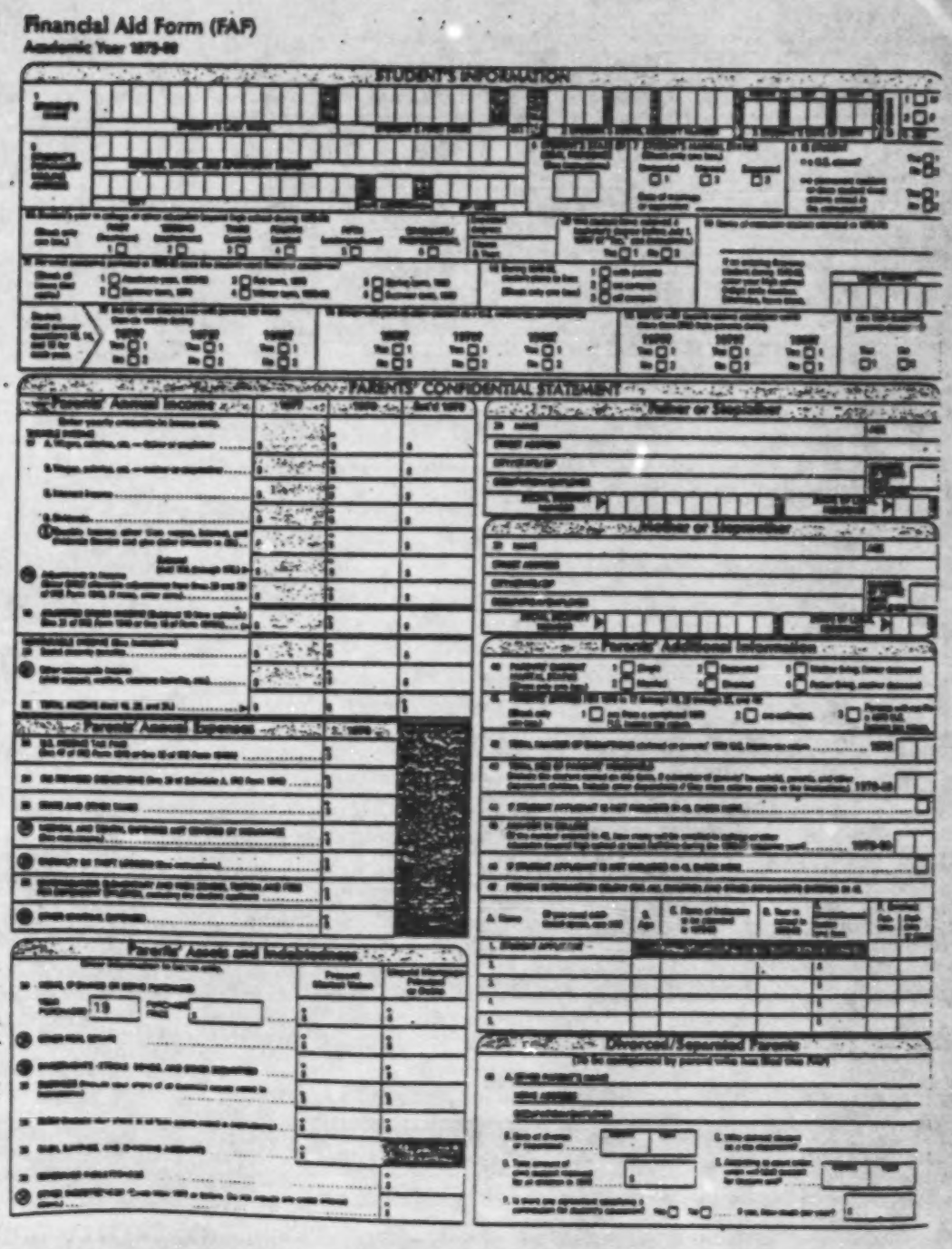
The SSAN will be used to verify the identity of the applicant, and as an account number (identifier) throughout the life of the grant in order to record necessary data accurately. As an identifier, the SSAN is used in such Program activities as: determining Program eligibility; certifying school attendance and student status; making grant payments under the alternative disbursement system; and verifying grant payments.

Authority for requiring the disclosure of an applicant's SSAN is grounded on section 7(a)(2) of the Privacy Act, which provides that an agency may continue to require disclosure of an individual's SSAN as a condition for the granting of a right, benefit, or privilege provided by law where the agency required this disclosure under statute or regulations prior to January 1, 1975, in order to verify the identity of an individual.

The Office of Education has, for several years, consistently required the disclosure of SSAN numbers on application forms and other necessary BEOG documents. (See section 411(b)(3) of Title IV – A – 1 of the Higher Education Act of 1965, as amended (20 U.S.C. 1070(b)(3).)

In addition, it should be noted that the social security account number of a parent of the applicant is also requested. Parents are advised that disclosure of their SSAN is voluntary and failure to provide it will not affect the applicant's eligibility for a BEOG award. Parent's SSAN will be recorded only on the application form itself and will not be maintained in any other system of records. Its use will be restricted to a sample of cases which may be used for further verification of information reported on the application by the applicant and/or parent(s).

If you are not applying to the BEOG Program, provision of your SSAN is optional; however, because many of those who complete the FAF have similar names, the SSAN is most helpful, and often critical, in assuring proper identification of an individual student by the CSS and by institutions and programs using the FAF. You are, therefore, strongly encouraged to include your SSAN if available.



Financial Aid Form (FAF)

Academic Year 1979-80

STUDENT'S INFORMATION

PARENTS' CONFIDENTIAL STATEMENT

Parents' Annual Income

Parents' Annual Expenses

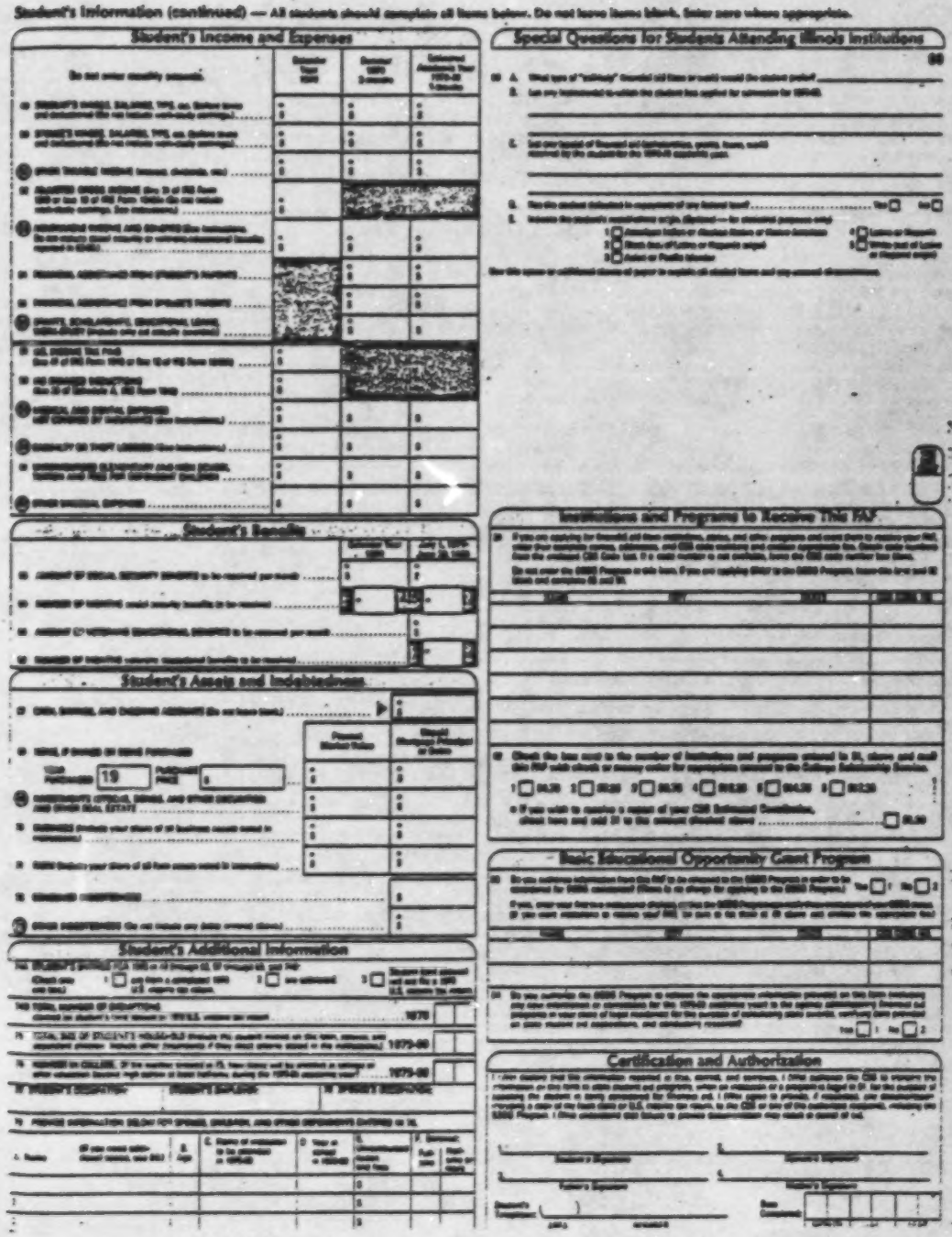
Parents' Assets and Indebtedness

Father or Stepfather

Mother or Stepmother

Parents' Additional Information

Divorced/Separated Parents



Student's Information (continued) — All students should complete all items below. Do not leave items blank. Enter zero where appropriate.

Student's Income and Expenses

Special Questions for Students Attending Illinois Institutions

Student's Benefits

Student's Assets and Indebtedness

Student's Additional Information

Institutions and Programs to Receive This FAF

Basic Educational Opportunity Grant Program

Certification and Authorization

REFERENCES

I. Cited References

Alexander, Karl & Eckland, Bruce. Contextual effects in the high school attainment process. American Sociological Review, 1975, 40, 402-16.

Alexander, Karl & Eckland, Bruce. High school context and college quality: Institutional contraints in educational stratification. Social Forces, 1977, 56, 166-88.

Alexander, Karl, Fennessey, James, McDill, Edward & D'Amica, Ronald. School SES influences--composition or context? Sociology of Education, 1979, 52 222-37.

Alexander, Karl & McDill, E. L. Selection and allocation within schools: Some causes and consequences of curriculum placement. American Sociological Review, 1976, 41, 963-80.

Alwin, Duane, Hauser, Robert, & Sewell, William. Colleges and achievement. In William Sewell and Robert Hauser (Eds.), Education, Occupation, and Earnings. New York: Academic Press, 1975, 113-42.

Anderson, C. Arnold, Bowman, Mary Jean, & Tinto, Vincent. Where Colleges Are and Who Attends. A Report Prepared for the Carnegie Commission on Higher Education. New York: McGraw-Hill, 1972.

Astin, Alexander W. Who Goes Where to College? Chicago: Science Research Associates, 1965.

Astin, Alexander W. Financial Aid and Student Persistence. Los Angeles, Calif.: Higher Education Research Institute, 1975.

Astin, Alexander W. Four Critical Years. San Francisco: Jossey-Bass Publishers, 1977.

Beezer, Robert H. & Hjelm, Howard F. Factors Related to College Attendance. U.S. Office of Education, Cooperative Research Monograph No. 8, 1961.

Bell, Gerald D. Processes in the formation of adolescents' aspirations. Social Forces, 1963, 42, 179-186.

Bielby, William, Hauser, Robert, & Featherman, David. Response errors of black and nonblack males in models of status inheritance and mobility. American Journal of Sociology, 1977, 83, 1242-88.

Bishop, John. The effects of public policies on the demand for higher education. Journal of Human Resources, 1977, 12, 285-307.

Bowers, William, Pierce, Glenn, Blitch, Carolyn, & Carr, Andrea. Access to Postsecondary Education, Boston: Center for Applied Social Research, 1978.

Bowles, Samuel. Schooling and inequality from generation to generation. Journal of Political Economy, 1972, 80, S219-S251.

Byrne, D.S., & Williamson, W. Some intra-regional variations in educational provision and their bearing upon educational attainment--the case of the North East. Sociology, 1972, 6, 71-87.

Campbell, Angus & Eckerman, William C. Public Concepts of the Values and Costs of Higher Education. Monograph No. 37, Survey Research Center, Institute for Social Research, University of Michigan, 1964.

Campbell, R. & Siegil, B. N. Demand for higher education in the United States. American Economic Review, 1967, 57.

Carmody, J. F., Fenske, R. H., & Scott, S.C. Changes in Goals, Plans, and Background Characteristics of College Bound High School Students. ACT Research Report No. 52. Iowa City, Iowa: Research and Development Division The ACT Program, August, 1972.

Caro, Francis G. Aspirations and expectations: a reexamination of the bases for social class differences in the occupational orientations of male high school students. Sociology and Social Research, 1965, 49, 465-75.

Carroll, C. Dennis. The Structure and Impact of Postsecondary Educational Opportunity: Measurement Issues Associated with Postsecondary Education Financing Variables. Washington, D.C.: U.S. Office of Education, Office of Evaluation and Dissemination, 1979.

Coleman, James, Bartot, Virginia, Lewin-Epstein, Noah, & Olson, Lorayn. Policy Issues and Research Design. Report to National Center for Education Statistics under Contract 300-78-0208. Chicago: National Opinion Research Center, 1979.

College Entrance Examination Board. SCOPE: A Study of Student Decision-Making and Its Outcomes: Grade 11 Profile. New York: CEEB, 1968.

College Entrance Examination Board. Making It Count: A Report on a Project to Provide Better Financial Aid Information to Students College Scholarship Service, New York, 1976.

College Scholarship Service Student Advisory Committee. What 250 students say about financial aid problems. The College Board Review 100. Summer, 1976, 15-25.

Corrazini, A., Dugan, D., & Grabowski, H. Determinants and distributional aspects of enrollment in U.S. higher education. Journal of Human Resources, Winter; 1972, 39-50.

Corwin, Thomas M., & Kent, Laura (Eds.). Tuition and Student Aid: Their Relation to College Enrollment Decisions. Washington, D.C.: Policy Analysis Service Special Report, American Council on Education. May 1978.

Davis, Jerry S. & Van Dusen, W. D. Guide to the Literature of Student Financial Aid. New York: College Scholarship Service, 1978.

Davis, Kingsley, & Moore, Wilbert. Some principles of stratification. American Sociological Review, 1945, 10, 242-49.

Davis, Nancy, & Bumpass, Larry. The continuation of education after marriage among women in the United States: 1970. Demography, 1976, 13, 161-174.

Della Fave, L. Richard. Success values: are they universal or class-differentiated? American Journal of Sociology, 1974, 153-69.

Duncan, B. Dropouts and the unemployed. Journal of Political Economy, 1965, 53, 121-34.

Finn, C. Scholars, Dollars, and Bureaucrats. Washington, D.C.: Brookings Institute, 1978.

Freeman, Richard B. The Over-educated American. New York: Academic Press, 1976.

Froomkin, Joseph. Middle-income students and the cost of education. Educational Record, 1978, 59, 254-67.

Grasso, John with Kohen, Andrew. The formation and revision of goals by young men. In Andrew Kohen et al., Career Thresholds. Vol. 6. Columbus, Ohio: Center for Human Resource Research, Ohio State University, 1977.

Hauser, Robert & Featherman, David. Equality of Access to Schooling: Trends and Prospects. Working paper 75-17. Madison, Wis.: Center for Demography and Ecology, University of Wisconsin, 1975.

Haven, Elizabeth, W. & Horch, Dwight H. Supplementary Tables. How College Students Finance Their Education: A National Survey of the Educational Interests, Aspirations, and Finances of College Sophomores in 1969-70. New York: College Entrance Examination Board, January, 1972.

Hearn, James C. Effects on enrollment of changes in student aid policies and programs. In J. Henry (Ed.), New Directions for Institutional Research: The Impacts of Student Aid on Institutions, No. 25. San Francisco: Jossey-Bass, 1980.

Henderson, Cathy, & Plummer, Janet C. Adapting to Changes in the Characteristics of College-age Youth. Washington, D.C.: Policy Analysis Service Reports, Vol. 4, No. 2. American Council on Education, December, 1978.

Heyns, Barbara. Social selection and stratification within schools. American Journal of Sociology, 1974, 79, 1434-51.

Hight, Joseph E. The demand for higher education in the U.S. 1927-72: the public and private institutions. The Journal of Human Resources, Fall, 1975, 10, 512-20.

Hogan, Dennis. Social Class Differentials in the Transition to Adulthood. Unpublished paper, Population Research Center, University of Chicago, 1979.

Howell, Frank M., & Frese, Wolfgang. Race, sex, and aspirations: evidence for the race convergence hypothesis. Sociology of Education, January, 1979, 52, 34-46.

Hyde, William. The Effects of Tuition and Financial Aid on Access and Choice in Postsecondary Education. Papers in Education Finance #1. Denver: Education Finance Center, Education Commission of the States, 1978.

Jackson, Gregory. Financial Aid to Students and the Demand for Post-secondary Education. Unpublished doctoral dissertation, Harvard University, 1977.

Jackson, Gregory. Financial aid and student enrollment. Journal of Higher Education, 1978, 49, 548-75.

Jackson, Gregory, & Weathersby, G. B. Individual demand for higher education. Journal of Higher Education, 1975, 46, 623-652.

Jaffee, A. J., & Adams, Walter. College education for U.S. youth: the attitudes of parents and children. American Journal of Economics and Sociology, 1964, 23, 269-83.

Jencks, Christopher, Smith, Marshall, Acland, Henry, Bane, Mary Jo, Cohen, David, Gintis, Herbert, Heyns, Barbara, & Michelson, Stephan. Inequality: A Reassessment of the Effect of Family and Schooling in America. New York: Harper and Row, 1972.

Jennings, M. Kent, & Niemi, Richard G. The Political Character of Adolescence: The Influence of Families and Schools. Princeton: Princeton University Press, 1974.

Journal of Human Resources. An Exchange. Winter, 1980, 15, 99-142.

Kerckhoff, Alan. Educational, Familial, and Peer Group Influences on Occupational Achievement. Final Report for Grant OEG-3-8-08-0053-0057 (085) from U.S. Department of Health, Education and Welfare, Office of Education, National Center for Educational Research and Development, 1971.

Kerckhoff, Alan C. The realism of educational ambitions in England and the United States. American Sociological Review, 1977, 42, 563-71.

Kerckhoff, Alan, & Campbell, Richard. Race and social status differences in the explanation of educational ambition. Social Forces, 1977, 55, 701-14.

Kohen, Andrew I., Nestel, Gilbert, & Karmas, Constantine. Success and Failure in College: A New Approach to Persistence in Undergraduate Programs. Center for Human Resource Research, The Ohio State University, February, 1976.

Kohn, Meir G., Manski, Charles F., & Mundel, David S. An Empirical Investigation of Factors Which Influence College-going Behavior. Prepared for the National Science Foundation, September, 1974.

Krauss, I. Sources of educational aspirations among working-class youth. American Sociological Review, 1964, 29, 867-889.

Lane, Michael. Explaining educational choice. Sociology, 1972, 6, 255-66.

Lansing, John B., Lorimer, Thomas, & Moriguchi, Chikashi. How People Pay for College. Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan, 1960.

Layard, R. & Psacharopoulos, G. The screening hypothesis and the returns to education. Journal of Political Economy, 1974, 82, 983-98.

Lazear, Edward. Family background and optimal schooling decisions. Review of Economics and Statistics, February, 1980, 62, 42-51.

Leslie, Larry L., & Fife, Jonathan D. The college student grant study. Journal of Higher Education, 1974, 45, 651-71.

Longanecker, David. Ability to Pay for Student Costs of Higher Education Taking into Account Family Income After Taxes. Paper presented at July 7, 1978 Research/Analysis Seminar, Washington, D.C.: American Council on Education.

MacKinnon, Neil, & Anisef, Paul. Self-assessment in the early educational attainment process. Canadian Review of Sociology and Anthropology, March, 1979, 16, 305-319.

McMahon, Walter W., & Wagner, Alan P. A Study of the College Investment Decision. Project Report 1. Iowa City, Iowa: ACT Research Report No. 59. 1973.

McPherson, Michael S. The demand for private higher education. In David G. Breneman, Chester E. Finn, and Susan C. Nelson (Eds.), Public Policy and Private Higher Education. Washington, D.C.: The Brookings Institution, 1978.

Magarrell, Jack. Colleges' 1978-79 cost increases fell below general rate of inflation. Chronicle of Higher Education, 1979, 19, 9.

Mare, Robert. Social Background and School Continuation Decisions. Institute for Research on Poverty Discussion Paper 462-77. Madison, Wisconsin: University of Wisconsin, 1977.

Mare, Robert, & Mason, William. A Multiple Group Measurement Model of Children's Reports of Parental Socioeconomic Status. Institute for Research on Poverty Discussion Paper #531-78. Madison, Wis.: University of Wisconsin, 1978.

Medsker, Leland L. & Tillery, Dale. Breaking the Access Barriers. New York: McGraw-Hill Book Co., 1971.

Morgan, William, Alwin, Duane, & Griffin, Larry. Social origins, parental values, and the transmission of inequality. American Journal of Sociology, 1979, 85, 156-66.

Mott, Frank L. & Moore, Sylvia, F. The Determinants and Consequences of Occupational Information for Young Women. Center for Human Resource Research, College of Administrative Science, The Ohio State University, April, 1976.

National Center for Education Statistics, National Longitudinal Study. Withdrawal from Institutions of Higher Education, NCES 77-264, Project Officer: William B. Fetters. Washington, D.C.: U.S. Government Printing Office, 1977.

National Center for Education Statistics, National Longitudinal Study. Transfer Students in Institutions of Higher Education, Sponsored Reports Series, NCES 77-250. Washington, D.C.: U.S. Government Printing Office, 1977a.

National Commission on the Financing of Postsecondary Education. Financing Postsecondary Education in the United States. Washington, D.C.: U.S. Government Printing Office, December, 1973.

National Manpower Institute. Between Two Worlds: Youth Transition from School to Work: Executive Summary, August, 1978.

Nelson, James E., Van Dusen, William D., & Edmund C. Jacobson. The Willingness of Parents to Contribute to Postsecondary Educational Expenses. College Entrance Examination Board, under contract to the Office of Planning, Budgeting, and Evaluation, Postsecondary Programs Division (U.S. Office of Education), 1978.

Nelson, Joel. High school context and college plans: the impact of social structure on aspirations. American Sociological Review, 1972, 37, 143-48.

Nielsen, François. High School and Beyond: The Hispanic Supplement: Conceptual Design. Chicago: University of Chicago. Draft prepared for submission to National Center for Education Statistics, 1980.

Niemi, Richard G. How Family Members Perceive Each Other. New Haven: Yale University Press, 1974.

Nolfi, George J., Fuller, Winship C., Corazzini, Arthur J., Epstein, William R., Freeman, Richard B., Manski, Charles F., Nelson, Valerie I. & Wise, David A. Experiences of Recent High School Graduates. Lexington, Mass.: Lexington Books, 1978.

Orwig, M. D. Financing Higher Education: Alternatives for the Federal Government. Monograph Five, ACT, 1971.

Otto, Luther, & Haller, Archibald. Evidence for a social psychological view of the status attainment process: four studies compared. Social Forces, 1979, 887-914.

Parnes, Herbert S. & Kohen, Andrew I. Occupational Information and Labor Market Status: The Case of Young Men. Center for Human Resource Research, The Ohio State University, September, 1973.

Peng, S. S., Bailey, J. P., & Eckland, B. K. Access to higher education: results from the national longitudinal study of the high school class of 1972. Educational Researcher, 1977, 6-11.

Porter, Marion, Porter, John, & Blishen, Bernard. Does Money Matter? Prospects for Higher Education in Ontario. Toronto, Canada: The Macmillan Company of Canada Limited, 1979.

Radner, R. & Miller, L.S. Demand and Supply in the U.S. Higher Education. New York: McGraw-Hill, 1975.

Rice, Lois. Race, Poverty, and the Colleges. Paper presented at the Conference on Racial and Ethnic Data, Institute for the Study of Educational Policy, Howard University, February, 1976.

Roper, Elmo and Associates. Parents' College Plans Study. The Education Program of the Ford Foundation, 1959.

Rosenbaum, James. Track misperceptions and frustrated college plans. Sociology of Education, April, 1980, 53, 74-88.

Rosenfeld, Rachel. Women's intergenerational occupational mobility. American Sociological Review, 1978, 43, 36-46.

Rosenthal, Robert, & Rosnow, Ralph. Artifact in Behavioral Research. New York: Academic Press, 1969.

Sandell, Steven, & Johnson, Rex. Young women and higher education. In Frank Mott et al., Years for Decision, Vol. 4, Ch. 2. Columbus, Ohio: Center for Human Resource Research, College of Administrative Science, Ohio State University, 35-64.

Scarr, Sandra, & Weinberg, Richard A. The influence of 'family background' on intellectual attainment. American Sociological Review, October, 1978, 43, 674-92.

Sewell, William, & Armer, J. Michael. Neighborhood context and college plans. American Sociological Review, 1966, 31, 159-68.

Sewell, William H., & Hauser, Robert M. Causes and consequences of higher education: models of the status attainment process. American Journal of Agricultural Economics, 1972, 54, 851-61.

Sewell, William, & Hauser, Robert. Education, Occupation, & Earnings: Achievement in the Early Years. New York: Academic Press, Inc., 1975.

Sewell, William, Hauser, Robert, & Wolf, Wendy. Sex, Schooling, and Occupational Status. Revision of a paper presented at the annual meetings of the American Sociological Association, Chicago, 1977, 1979.

Sewell, William, & Shah, Vimal. Socioeconomic status, intelligence, and the attainment of higher education. Sociology of Education, Winter, 1967, 40, 1-23.

Sewell, William, & Shah, Vimal. Social class, parental encouragement, and educational aspirations. American Journal of Sociology, March, 1968, 73, 559-72.

Sociology of Education. Three Perspectives on IQ and Social Differentiation. 1979, 52, 163-96.

Solmon, L. The definition of college quality and its impact on earnings. Explorations in Economic Research, Fall, 1975, 2, 537-88.

Spaeth, Joe, & Greeley, Andrew. Recent Alumni and Higher Education: A Survey of College Graduates. New York: McGraw Hill, 1970.

Spenner, Kenneth, & Featherman, David L. Achievement ambitions. In Alex Inkeles (Ed.), Annual Review of Sociology, 1978, 4, Palo Alto, Calif.: Annual Reviews, Inc.

Stanley, Julian C. Predicting college success of educationally disadvantaged students. Barriers to Higher Education, New York: College Entrance Examination Board, 1971, 58-77.

Suter, Larry E. Elementary and secondary school progression, high school graduation, and college entrance of the American population: 1950-78. Population Division, Bureau of the Census, 1978. (Prepared for Alan Kerckhoff, Ed., Research in Education and Socialization.)

Thomas, Gail, Alexander, Karl, & Eckland, Bruce. Access to higher education: the importance of race, sex, and social class. School Review, 1979, 133-56.

Thurow, Lester. Investment in Human Capital. Belmont, Calif.: Wadsworth Publishing Company, Inc., 1970.

Tierney, Michael L. The Impact of Financial Aid on Student Demand for Public/Private Higher Education. Unpublished paper. December 21, 1978.

Tinto, Vincent. Accessibility of Colleges as a Factor in the Rate and Selectivity of College Attendance. Unpublished Doctoral dissertation, University of Chicago, 1971.

Tuckman, Howard P. Local colleges and the demand for higher education: the enrollment inducing effects of location. American Journal of Economics and Sociology, 1973, 32, 257-268.

Wattenbarger, James L. Student fees and public responsibility. In M. D. Orwig (Ed.), Financing Higher Education: Alternatives for the Federal Government, 1971, ACT.

Weisbrod, B.A., & Karpoff, P. Monetary returns to college education, student ability, and college quality. Review of Economics and Statistics, 1968, 50, 491-97.

Wiley, David E. Another hour, another day: quantity of schooling, a potent path for policy. In William H. Sewell, Robert M. Hauser, and David L. Featherman (Eds.), Schooling and Achievement in American Society. New York: Academic Press, 1976.

Willett, Sandra. Information on Federal Student Assistance: Its Availability, Price, and Other Unfinished Business Unpublished manuscript. Cambridge, Mass: Kennedy School of Public Policy, Harvard University, 1976.

Williams, Trevor. Abilities and environments. In William H. Sewell, Robert M. Hauser, and David L. Featherman (Eds.), Schooling and Achievement in American Society. New York: Academic Press, 1976.

Yankelovich, Skelly and White, Inc. The General Mills American Family Report 1974-75: A Study of the American Family and Money, 1975.

II. Additional References

Alwin, Duane F. Socioeconomic background, colleges, and post-collegiate achievements. In William H. Sewell, Robert M. Hauser, and David L. Featherman (Eds.), Schooling and Achievement in American Society. New York: Academic Press, 1976.

American Association of State Colleges and Universities. Patterns in Undergraduate Enrollment Growth Among State Colleges and Universities 1969-1974.

Astin, Alexander W. The intermediate effects of inequality: differences in access and utilization of educational resources. American Educational Research Journal, 1974, 11, 155-159.

Astin, Alexander W. SISFAP--Study A: The Impact of Student Financial Aid Programs on Student Choice. Mimeographed report of research supported by the Office of Planning, Budgeting and Evaluation, U.S.O.E., Contract #300-75-0382, 1978.

Barnes, Gary T. An Economist's View of the Uniform Methodology. ACT Special Report Twenty-One, 1977.

Breneman, D. W. & Finn, C. E., Jr. Public Policy and Private Higher Education. Washington, D.C.: The Brookings Institution, 1978.

Carlson, Daryl E., Farmer, James, & Weathersby, George B. A Framework for Analyzing Postsecondary Education Financing Policies. A staff report for the National Commission on the Financing of Postsecondary Education. Washington, D.C.: U.S. Government Printing Office, May, 1974.

Catsiapsis, George. Prediction of the Expected Amounts of Financial Aid and Parental Contribution for Postsecondary Education and Their Effects on Individual Enrollment Decisions. Doctoral dissertation, University of Chicago,

College Entrance Examination Board. SCOPE: A Study of Student Decision-Making and Its Outcomes: Four States Profile, Grade 9. New York: CEEB, 1966.

College Entrance Examination Board. Colloquium on Barriers to Higher Education, Racine, Wisconsin, 1970. New York: CEEB, 1971.

Davis, Margaret. Families in an Organizational Environment: The Effects of Organizational Affiliations of Family Members on Family Structure and Activities. Unpublished doctoral dissertation, Stanford University, 1979.

Doerman, Humphrey. Lack of money: a barrier to higher education. In Barriers to Higher Education. New York: College Entrance Examination Board, 1971, 130-47.

Duncan, B. Early work experiences of graduates and dropouts. Demography, 1967, 4, 19-29.

Elton, C. F. & Rose, H. A. A longitudinal study of the vocationally undecided male student. Journal of Vocational Behavior, 1971, 1, 85-92.

Featherman, David L. & Hauser, Robert M. Sexual inequalities and socioeconomic achievement in the U.S. American Sociological Review, 1976, 41, 462-83.

Friedman, Nathalie, Jaffe, A. J., with Bernstein, Amy, & Flam, Helen. Review of Research Literature for Postsecondary Education Analysis. New York: Columbia University Graduate School of Business, 1978.

Gladieux, Lawrence. Distribution of Federal Student Assistance: The Enigma of the Two-Year Colleges. Princeton, N.J.: College Entrance Board, 1975.

Gordon, Edmund W. Programs and practices for minority group youth in higher education. In Barriers to Higher Education. New York: College Entrance Examination Board, 1971, 109-26.

Griffin, Larry & Alexander, Karl. Schooling and socioeconomic attainments: high school and college influences. American Journal of Sociology, 1978, 84, 319-47.

Hansen, W. Lee. Equity and the finance of higher education. Journal of Political Economy, 1972, 80, S260-S273.

Hansen, W. Lee & Nelson, F. Howard. The distribution efficiency of benefits for a student financing program with payment obligations contingent upon future income. Institute for Research on Poverty Reprint Series, Reprint 272. (Reprinted from Proceedings of the Inaugural Convention of the Eastern Economic Association, July 1975, 2, no. 3.

Hansen, W. Lee & Weisbrod, Burton A. Benefits, Costs, and Finance of Public Higher Education. Chicago: Markham Publishing Co., 1969.

Hanushek, E. A. & Kain, J. E. On the value of equality of educational opportunity as a guide to public policy. In F. Mosteller and D. P. Moynihan (Eds.), On Equality of Educational Opportunity. New York: Vintage Books, 1972, 116-145.

Hartman, Robert W. Federal Options for student aid. In D. W. Breneman and C. E. Finn, Jr. (Eds.), Public Policy and Private Higher Education. Washington, D.C.: Brookings Institution, 1978, 233-272.

Healy, Timothy S. Open admissions: status, trends, and implications. Barriers to Higher Education. New York: College Entrance Examination Board, 1971, pp. 44-52. (Response by John D. Millet in Barriers to Higher Education. New York: CEEB, 1971, pp. 53-57.)

Hilton, Thomas & Haskell, Rhett. National Longitudinal Study of the High School Class of 1972: Final Report, Appendix F. U.S. Department of Health, Education and Welfare, National Commission on Education Statistics. Princeton, N.J.: Educational Testing Service, 1973.

Huff, Robert P. Need assessment of upper-middle income families--are they being excluded? The College Board Review, 1972-73, 86, 25-28.

Hyde, William D., Jr. Student Financial Aid Proposals and the Middle Income 'Squeeze': Tax Credits or Expansion of Basic Grants. Paper 14, June 9, 1978. Denver, Colo.: Education Finance Center.

Jencks, Christopher. Social stratification and higher education. In M. D. Orwig, (Ed.) Financing Higher Education: Alternatives for the Federal Government, ACT.

Johnstone, D. Bruce. Federally sponsored student loans: an overview of issues and policy alternatives. In Lois Rice (Ed.), Student Loans: Problems and Policy Alternatives. New York: College Entrance Examination Board, 1977.

Kayser, B. D. & Summers, G. F. The adequacy of student reports of parental SES characteristics. Sociological Methods and Research, 1973, 1, 303-315.

King, Randall, H. The Labor Market Consequences of Dropping Out of High School: Some Preliminary Results for Young Men and Young Women. Reprint 78-4. Center for Human Resource Research, College of Administrative Science, Ohio State University. Reprinted from American Statistical Association. Proceedings of the Business and Economic Statistics Section, Part II, 1977.

Kinloch, G. C. & Perrucci, R. Social origins, academic achievement, and mobility channels: sponsored and contest mobility among college graduates. Social Forces, 1969, 48, 36-45.

Kohen, Andrew I. & Barker, Susan C. The Antecedents and Consequences of Interruptions in Formal Schooling: A Review of the Literature. Center for Human Resource Research, College of Administrative Science, The Ohio State Univerarity, February, 1976.

Kohen, Andrew I., Grasso, John G., Myers, Steven, C., & Shields, Patricia H. Career Thresholds: Longitudinal Studies of the Educational and Labor Market Experiences of Young Men. Volume 6, March, 1977. Center for Human Resource Research, College of Administrative Science, The Ohio State University.

Magarrell, Jack. The enrollment roller coaster: colleges fear the big dip. The Chronicle of Higher Education, 1978, 17. 1.

Mott, Frank L., Sandell, Steven H., Shapiro, David, Brito, Patricia K., Carr, Timothy J., Johnson, Rex C., Jusenius, Carol T., Koenig, Peter J. & Moore, Sylvia F. Years for Decision: A Longitudinal Study of the Educational, Labor Market, and Family Experiences of Young Women, 1968-1973. Center for Human Resource Research, College of Administrative Science, The Ohio State University, Columbus, Ohio, 1977.

Olson, Lawrence. Dropping Out Can Pay: An Analysis of Returns to Private Vocational Schooling. Lexington, Mass.: Data Resources, Inc., October, 1978.

Olson, Lawrence, White, Halbert, & Shefrin, H. M. Optimal investment in schooling when incomes are risky. Journal of Political Economy, 1979, 87, 522-39.

Recession sends students to community colleges. Chronicle of Higher Education, 1979, 19, 2.

Sandell, Steven H. The Demand for College: The Effect of Local Colleges on Attendance. Center for Human Resource Research, College of Administrative Science, The Ohio State University, June, 1976.

Schultz, Theodore W. Resources for higher education: an economist's view. Journal of Political Economy, 1976, 76, 327-47.

Sewell, William H., Haller, Archibald O., & Ohlendorf, George W. The educational and early occupational status attainment process: replication and revision. American Sociological Review, 1970, 35, 1014-27.

Sewell, William H., Haller, Archibald, & Portes, Alejandro. The educational and early occupational process. American Sociological Review, 1969, 34, 82-92.

Thurow, Lester. Generating Inequality. New York: Basic Books, 1975.

Tierney, M. L. The Impact of Financial Aid on Public/Private Postsecondary Education: Some Policy Implications. A paper presented at the American Association of Higher Education annual meeting at Washington, D.C., April, 1979.

Tierney, Michael L., Houang, Richard, & Henson, James. Alternative Estimation Procedures for Studies of Student College Choice Behavior: A Cross-Validation Analysis. Presented at American Educational Research Association annual meeting, April 11, 1979.

Turner, Ralph. Sponsored and contest mobility and the school system. American Sociological Review, 1960, 25, 855-67.

U.S. Congressional Budget Office. Federal Assistance for Postsecondary Education: Options for Fiscal Year 1979. Washington, D.C.: U.S. Government Printing Office, 1978.

U.S. Department of Commerce, Bureau of the Census. Collecting and Validating Data on Income and Assets, 1937-1975. Washington, D.C., SMIS Bibliography.

Wagner, Alan P. & Tabler, Kenneth A. Distribution and Packaging of Student Financial Aid: Some Evidence from the Survey of the High School Class of 1972. Washington, D.C.: U.S. Department of Health, Education and Welfare, National Commission on Education Statistics, National Longitudinal Study, 1977.

Willingham, William W. Educational opportunity and the organization of higher education. in Barriers to Higher Education. New York: College Entrance Examination Board, 1971, 1-23.